

Monthly Labor Review

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Working Conditions of Industrial Scientists

Employment Outlook in Petroleum Production and Refining

Full Employment Report by UN Experts

Injury Rates in Construction Occupations, 1948

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS

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Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

LAWRENCE R. KLEIN, *Chief, Office of Publications*

CONTENTS

Special Articles

- 369 Working Conditions of Industrial Scientists
- 374 Employment Outlook in Petroleum Production and Refining

Summaries of Studies and Reports

- 379 Full Employment Report by UN Experts
- 382 Statistics of Insured Unemployment under State Programs
- 384 Dismissal-Pay Provisions in Union Agreements, 1949
- 387 Injury Rates in Construction Occupations, 1948
- 389 New Family Expenditure Study in Denmark
- 392 Trade-Union Organization in Ireland
- 396 Professional Income: Lawyers and Dentists, 1929-48
- 401 Rent Decontrol in Large Cities
- 402 Annual Report of the NLRB, Fiscal Year 1949
- 403 Reduction of Backlog in Railroad Grievance Cases
- 405 Hosiery Manufacture: Earnings in October 1949
- 408 Footwear Manufacturing: Earnings in October 1949
- 410 Labor-Management Disputes in March 1950

Technical Notes

- 412 XII. Occupational Wages: Establishment Sampling
- 418 XIII. Occupational Wages: Conduct of Surveys
- 421 OASI Earnings Statistics and Their Uses

Departments

- III The Labor Month in Review
- 426 Recent Decisions of Interest to Labor
- 432 Chronology of Recent Labor Events
- 433 Publications of Labor Interest
- 440 Current Labor Statistics (list of tables)

April 1950 • Vol. 70 • No. 4

This Issue in Brief...

UNEMPLOYMENT resulting from a deficiency of demand is the chief concern of the **FULL EMPLOYMENT REPORT BY UN EXPERTS** (p. 379). Other types of unemployment—those resulting from lack of capital equipment or from structural features of the economy—are given less emphasis. The experts recommend measures which are consistent with the institutions in free enterprise economies. Full employment, they believe, can only exist in "an expanding world economy of which the economic development of under-developed countries would form the most important single element."

Examples of relatively steady growth in industrial employment in the United States are given in **WORKING CONDITIONS OF INDUSTRIAL SCIENTISTS** (p. 369) and **EMPLOYMENT OUTLOOK IN PETROLEUM PRODUCTION AND REFINING** (p. 374). Scientists in industrial research laboratories have increased greatly in number during recent years. In addition to the usual benefits provided, such as paid vacations and sick leave, these employees are afforded opportunities for scientific advancement. Included is time for free research in the majority of the companies studied, provided advance approval is obtained. Some companies limit free research to projects that relate to their own field. In both petroleum production and refining, employment is expected to increase gradually during the next 5 to 10 years. The expected rise in employment, combined with replacement needs, will provide many job opportunities for new workers. At the end of 1949, petroleum production and refining employed more than 400,000 wage and salary workers in a wide range of jobs and in many different parts of the country. Ex-

panding employment in production and refining is predicated on a continuing increase in demand for petroleum products and on an adequate supply of oil which the upward trend in proved reserves appears to indicate.

Occupational injury rates are stressed in **INJURY RATES IN CONSTRUCTION OCCUPATIONS, 1948** (p. 387). To obtain information by occupation, the survey of the industry was greatly expanded in 1948. The results showed that pile-driver operators had the highest injury-frequency rate per million employee-hours worked, 97.3, among the 43 occupations studied. Welders followed with a rate of 88.4. Only three occupations had frequency rates below 20.

Reduced backlog of unresolved cases are discussed in **ANNUAL REPORT OF THE NLRB, FISCAL YEAR 1949** (p. 402) and **REDUCTION OF BACKLOG IN RAILROAD GRIEVANCE CASES** (p. 403). The NLRB, in its first full year under the Labor Management Relations Act, closed a record number of cases. Of the union-shop elections held, the AFL, the CIO, and independent union groups each won about the same proportion of the elections in which they participated (97 percent). In representation elections, the independent unions won the highest proportion of elections (72 percent), followed by the AFL (62 percent) and the CIO (55 percent). The backlog of railroad grievance cases was reduced through introduction of important procedural changes in May 1949.

OCCUPATIONAL WAGES: ESTABLISHMENT SAMPLING (p. 412) and **CONDUCT OF SURVEYS** (p. 418) are the final articles, XII and XIII, of the technical notes covering the major statistical series of the Bureau of Labor Statistics. The primary purpose of the occupational wage studies, is to indicate wage levels as of a particular time. The first of these technical notes was published in the September issue of the *Monthly Labor Review*. Included in this series are technical descriptions covering prices, work stoppages, building construction, employment, earnings and hours, and industrial injuries.

The Labor Month in Review

AN IMPROVEMENT in the employment situation in March helped reduce unemployment by more than half a million. Industrial production is estimated to have been slightly above the level prevailing before the February coal strike and construction continued at record levels. Prices on the average again did not fluctuate significantly.

Developments of particular interest to labor included Government reorganization plans affecting labor agencies and a renewal of talk of labor unity. The strike at Chrysler continued into April.

Employment Situation Improved

A reduction in unemployment of 550,000 was the most marked change in the economic situation between February and March, according to the statistics on the labor force released by the Bureau of the Census. The decline in unemployment was attributed in part to the spring seasonal pick-up in a number of industries. However, the number of unemployed in March, 4.1 million, was still about a million more than a year earlier.

Nonagricultural employment showed a relatively small seasonal increase of about 100,000 to a total of 50.9 million, despite a large amount of reemployment of jobless workers in nonagricultural jobs. Apparently there was some shifting from nonfarm to farm jobs during the period and many employed women appear to have withdrawn from the labor force. Although agricultural employment increased by 450,000 between February and March to 6.7 million, there were about 700,000 fewer farm workers than in March 1949.

Collective Bargaining Developments

Settlement of the coal strike in early March left the strike of Chrysler workers as the only major work stoppage in progress. A new offer made by the company which would have established a 30-million-dollar pension fund was turned down by

the union on the basis that it was not actuarially sound. On April 5, however, the union was reported to have made a new offer and prospects for settlement appeared favorable.

The United Automobile Workers (CIO) was also active in negotiations with other companies during the month. An agreement was concluded with the Ford Motor Co. which settled certain differences between the parties in the interpretation of the previous agreement on pensions. The Nash-Kelvinator Corp. and the union adopted a pension plan providing \$100 a month benefits to retired workers, including social security payments. Bargaining for a new contract with the General Motors Corp. started at the end of March.

Several disputes in the railroad industry remained unsettled throughout March and early April. An emergency board conducted hearings in the Nation-wide dispute over the requests by the Brotherhood of Railroad Trainmen and the Order of Railway Conductors for wage increases and other benefits. The same board held hearings on a dispute between the Switchman's Union of North America (AFL) and certain western railroads.

Other developments affecting labor-management relations included an order by the National Labor Relations Board for 51 elections among approximately 55,000 employees of the Westinghouse Electric Corp. in 13 States. The elections are for the purpose of determining whether the employees wish to be represented in collective bargaining by the United Electrical Workers (Ind.), the International Union of Electrical Workers (CIO), or by no union. The IUE (CIO) won the employee-representation election at Sperry Gyroscope Co. by a six-to-one margin. No new developments were apparent in the telephone industry, in which negotiations were continuing at the President's request. Seven maritime unions—AFL, CIO, and independent—signed a mutual-aid pact during March to continue their fight to retain their present union hiring practices which the courts have declared in violation of the Taft-Hartley Act.

Labor Unity Talk

A new move in the talk of labor unity was made by the Congress of Industrial Organizations when President Philip Murray proposed a "common program" for the major labor organizations. On April 4, Murray sent letters to the American

Federation of Labor, the Railroad Brotherhoods, the United Mine Workers, and the International Association of Machinists, urging the creation of a joint committee, on the national level, with authority to coordinate organized labor's efforts in economic, legislative, and political spheres of activity.

In response to Mr. Murray's proposal, John L. Lewis, president of the United Mine Workers, indicated that his union would probably participate in the joint committee. The International Association of Machinists also showed interest in the plan. William Green, president of the AFL, told the press that prospects for labor unity were "better today than they have been in the past 6 years."

An attitude of greater cooperation has been apparent among the major unions since their joint action in the new international labor organization. In February, the AFL executive council was reported to have invited the other organizations to reaffiliate, and in March the United Mine Workers suggested a "mutual aid pact" with the United Steelworkers.

Labor Department and NLRB Changes

Among the 21 Government reorganization orders sent to Congress by the President on March 13 are three affecting the Department of Labor and one affecting the National Labor Relations Board. The orders become effective unless vetoed by vote of a majority of the members of either House of Congress within 60 days after they were proposed.

Under Reorganization Plan 6, the functions of all agencies, officers, and employees, of the Department of Labor, except hearing examiners, are transferred to the Secretary of Labor. The plan also sets up an Administrative Assistant Secretary of Labor to provide the Secretary with assistance in the heavy managerial responsibilities of his office. The House Committee on Expenditures in Executive Departments reported the plan favorably after hearing testimony in its support from Secretary Tobin.

Responsibility for coordination of the enforcement of wages and hours legislation in the various acts affecting Federal or federally financed contracts is placed in the Secretary of Labor by Reorganization Plan No. 14. The Bureau of Employees' Compensation is transferred to the Labor Department from the Federal Security Agency by Plan No. 19.

The proposal which aroused most opposition was Plan No. 12, affecting the NLRB. The plan abolishes the office of General Counsel and transfers his functions to the Board, and transfers the administrative functions of the Board and of the General Counsel to the Chairman of the Board. After several days of hearings a resolution to kill the plan was reported unfavorably by the House Committee on March 23. Paul M. Herzog, Chairman of the NLRB, speaking for all the Board members, told the Committee: "By February 1949 * * * following 18 months' experience, the Board felt impelled to advise the Congress that the demonstrated disadvantage of the existing separation far outweighed the asserted advantages, and could not be cured by minor corrections * * *.

"We are now even readier to say, on the basis of 30 months' experience, that the 1947 experiment has been a failure * * *. Can a single policy of Congress, no matter what that policy, be administered effectively by a two-headed agency? We hold that it cannot."

Opponents of the plan, including representatives of the National Association of Manufacturers and the United States Chamber of Commerce, declared that the present system has functioned fairly for both employers and employees.

Factory Earnings at Highest Point

Earnings of factory workers have been at record levels in recent months. Average weekly earnings in manufacturing in February were \$56.37, and gross hourly earnings averaged \$1.42. The average workweek remained relatively unchanged for several months at about 40 hours a week, but hourly earnings increased slightly. This partly reflects a small increase in wage rates as well as some rise in employment in certain higher-paying industries. Increased earnings in some industries between January and February resulted from the new 75-cent minimum wage rate which became effective January 25, under the amended Fair Labor Standards Act.

The slight decrease in living costs over the past few months has permitted factory workers and others whose earnings have risen to improve their "real" income status. In terms of 1939 purchasing power, average weekly factory earnings, after allowance for taxes and social security deductions, are currently higher than at any other time in the postwar period and are at approximately the level prevailing near the end of the war.

Working Conditions: Industrial Scientists¹

Opportunities for Scientific Advancement,
Insurance and Pension Plans, and Other Special Benefits
Provided by Industrial Research Laboratories

EMPLOYMENT OF SCIENTISTS in industrial research laboratories has increased greatly in recent years with the rapid growth of scientific research by American industry.² Development of large atomic energy laboratories, together with this expansion, prompted the Bureau of Labor Statistics, in cooperation with the U. S. Atomic Energy Commission, to study working conditions of those employed in chemical and electronic research laboratories of 25 large companies.

About 11,000 scientists engaged in research at professional levels were covered by the study.³ They represent almost a fifth of the total number employed in industrial laboratories listed by the National Research Council of the National Academy of Sciences. Data were collected in late November and December 1949 by BLS and AEC representatives in interviews with laboratory officials of the 25 companies.

Work Schedules and Overtime Pay

All companies included in the study stated that their scientists observed regular work schedules. In one, however, scientists earning more than \$750 a month were not governed by any set hours of work. This information was obtained in response to questions as to whether scientists were generally expected to be on duty during the regular working hours of the laboratory (or at least required to work a certain number of hours a week)

¹ By Edyth M. Bunn and Lily Mary David of the Bureau's Division of Wage Statistics.

² The increase from 1940 to 1946 was estimated to be 50 percent by the National Research Council of the National Academy of Sciences in the 1946 edition of their directory, *Industrial Research Laboratories of the United States*.

³ This number does not include laboratory assistants or those engaged in testing activities unrelated to research, who were not included in the study.

or whether they were entirely free to work when they wished, without keeping a time record.

The usual schedule was 8 hours a day and 40 hours a week. However, two relatively small laboratories were on a 7½-hour day and 37½-hour week, and a larger laboratory had a 38½-hour week divided into 7½-hour days.

Extra pay for overtime was provided by less than half of the companies included in the survey, employing about two-thirds of all the scientists studied. Many of the laboratories with overtime provisions limit them to certain scientists, usually on the basis of salary.⁴ The most common rate of overtime pay, in terms of number of scientists affected, is straight time. Some companies pay one and one-half times the regular rate; others have a sliding scale varying with salary.

Of the companies that do not provide extra pay for overtime, four, employing 11 percent of the scientists, usually allow compensatory time off, and two give favorable consideration to requests for personal leave in recognition of overtime.

In addition to those companies having formal overtime-pay arrangements, two companies with comparatively small laboratories stated specifically that if the workweek were to be extended beyond 40 hours they would probably adjust salaries on a straight-time basis. It can be inferred that most companies would increase basic salaries, if there were a general increase in the length of the workweek, such as occurred during World War II.

⁴ Companies reporting no overtime-pay provisions for scientists presumably do not classify any workers covered by the hours provisions of the Fair Labor Standards Act as scientists engaged in research. So far as can be determined from their reports, the practice in most companies is to set for employees exempt from these hours provisions a salary minimum that is higher than the \$200 previously used by the Wage and Hour Division or even than the \$325 minimum in the revised regulations effective January 25, 1950.

A fairly common practice in industrial laboratories with formal overtime arrangements, is apparently to distinguish between regularly scheduled overtime, the need for which is recognized in advance, and occasional or incidental overtime. Usually, overtime must be authorized in advance by a company official if it is to be paid for. Several companies provide only expense money, compensatory time off, or no pay for incidental extra work.

In most industrial laboratories, overtime work is the exception rather than the rule. Apparently, any overtime that is worked is on an informal or incidental basis and is usually not paid for, even where there is a definite policy of overtime pay. Only 3 companies, employing less than 6 percent of the scientists, reported that overtime is frequent.

Holidays and Leave

At least 6 holidays annually are provided by all laboratories studied. Nearly half of the companies, employing two-fifths of the scientists, recognize only 6 holidays. In companies with a fifth of the scientists 8 holidays are provided. Twelve was the largest number reported.

Vacations with pay are provided scientists by all the companies covered in the survey. Details of plans vary, but 2 weeks after 1 year of service, increased to 3 weeks after 15 years, was found in the majority of companies. Some companies give a longer vacation after 20 or more years of employment (table 1).

Carrying vacation leave from one year to the

next is apparently not encouraged, and companies are reluctant to provide pay in lieu of vacations except in extreme emergencies. The belief that paid vacations are of value to the employer as well as to the employee was general among the laboratories studied. Leave is transferred only in unusual circumstances, or for employees with long service, and then only if approved by a high company official. One company reported that even in extreme cases, vacations would be denied only upon a doctor's certification that the employee's health would not suffer. Regular pay is allowed for any unused vacation by the companies that reported on this point. All companies pay for any unused vacation time when scientists leave their employ; one company, however, does not allow pay if the employee resigns.

As a rule, scientists are not expected to use vacation time for emergencies or for half-day or day absences to attend to personal business. Only one company definitely stated that vacation leave was to be used to attend to personal business; two others did not report on provisions for short absences. The remainder reported that extra leave for short absences was given on an individual basis. Companies with most of the workers set maximum limits of from 5 to 30 days a year.

Formal provisions for sick leave with pay were reported by more than two-thirds of the companies, employing nearly three-fifths of the scientists. Sick-leave allowances vary considerably (see table 2). Allowances to the extent of 52 weeks' full pay after 25 years' service were reported.

TABLE 1.—*Details of graduated vacation plans for scientists in industrial research laboratories of 25 companies, 1949*

Basic vacation plans	Number of companies	Percent of scientists ¹	Provisions for other periods of service	Number of companies
All plans.....	25	100		
2 weeks after 1 year's service.....			6 months to 1 year, 1 week.....	5
3 weeks after 15 years' service.....	15	77	Up to 1 year, 1 day for each month.....	2
			Up to 1 year, 1 week.....	1
2 weeks after 1 year's service.....	8	17	6 months to 1 year, 1 week.....	1
Up to 6 months, 1 week; 6 months to 10 years, 2 weeks; after 10 years, 3 weeks.	1	(6)	After 25 years, 4 weeks.....	1
1 to 10 years, 12 days.....	11	(9)	do.....	4
			(No other provisions.....	2
			Up to 1 year, 1 day for each month.....	2
			6 months to 1 year, 1 week.....	1
			After 5 years, 3 weeks.....	2
			After 5 years, 3 weeks.....	1
			After 20 years, 3 weeks.....	2
				13

¹ On all tables this percentage refers to total employment of scientists in companies in which the provision is in effect even though the provision does not apply to all scientists in the company.

² Some employees receive 3 weeks after 12 years' service.

³ In 1 company, senior personnel (\$350 a month and over) are granted 3 weeks after 1 year's service.

⁴ Information withheld to avoid disclosing data for individual companies.

⁵ After 10 years, merit vacations of 1 week during 1 of the ensuing 5 years; after 15 years, 2 weeks during 1 of the ensuing 5 years; after 20 years, 3 weeks during each 5-year period.

TABLE 2.—*Formal provisions for paid sick leave for scientists with 1 and 5 years' service in industrial research laboratories, 1949*

Paid sick leave provided annually	Number of companies	Percent of scientists
Companies studied	25	100
1 year of service		
Provisions for paid sick leave	16	39
1 week	4	12
2 weeks	1	(1)
2 weeks at full pay and 2 or 4 weeks at half pay	2	6
2 weeks at full pay and 8 weeks at two-thirds pay	1	(1)
4 weeks	3	4
4 weeks at full pay and 2 weeks at half pay	1	(1)
22 or 24 days	3	5
13 weeks at full pay and 13 weeks at \$22 a week	1	(1)
No provisions for paid sick leave	9	61
5 years of service		
Provisions for paid sick leave	17	57
1 week	2	8
3 or 4 weeks	2	5
5 weeks	2	3
6 weeks at full pay and 20 weeks at half pay	1	(1)
23 days	1	(1)
8 weeks	1	(1)
8 weeks at full pay and 12 weeks at two-thirds pay	1	(1)
8 weeks at full pay and 16 weeks at half pay	1	(1)
13 weeks at full pay and 13 weeks at half pay	2	20
16 weeks at full pay and 10 weeks at \$22 a week	1	(1)
20 weeks	1	(1)
24 weeks	2	4
No provision for paid sick leave	8	43

¹ Information withheld to avoid disclosing data for individual companies.

A majority of the companies with formal plans may extend the amount of sick leave in case of special need or for employees with long service. Additional leave is approved on the basis of individual circumstances. All laboratories not having formal plans arrange for paid sick leave on an individual case basis. In these instances leave is approved by a company executive or by a standing committee.

Sabbatical leave is not customarily granted by companies to scientists in their employ. Only one of the companies studied reported any extended leave of this nature. This plan was informal and leave was granted on an individual basis only to senior scientists (over \$5,000 salary). However, some companies may grant paid leave to scientists for graduate study or for training in a special field.

Opportunities for Scientific Advancement

The laboratories studied were also asked to report on opportunities for scientific advancement, which included chances for exchange of information, for obtaining further education, and for scientific recognition. Additional information was obtained on policies regarding patents for inventions or discoveries made by scientific employees.

A free exchange of views within the laboratory is encouraged by most of the companies. Staff meetings open to all scientists are held frequently. Weekly or monthly seminars are held at which papers are read or scientists from outside are invited to speak. Two companies publish a monthly bulletin for interchange of scientific information.

Although a number of the companies support fellowships, the scientists employed by these companies do not necessarily receive them. Some companies pay part of the tuition of employees who take courses related to their work, and one company reported a graduate scholarship plan for its engineers.

Attendance at scientific meetings is, in general, encouraged by the companies operating research laboratories. All pay salaries and expenses of delegates. In addition, at least 5 companies grant leave with pay for attendance by employees not chosen as delegates; one company sometimes pays part of their travel expenses also.

Opportunity to spend time on free research is given by a majority of the companies, but advance approval may be required. Some companies limit free research to projects related to their own interests. Companies stated that they encourage scientists to use company time for writing articles for scientific magazines or to prepare papers for seminars. However, some of the laboratories require the writer to clear with a company executive before using company time.

Scientists must have permission to publish any discoveries made during their employment, but they are encouraged to speak or to read papers before meetings of professional groups. Several companies reported payment of membership fees in scientific associations as a means of encouraging scientists to participate in such group activities.

Inventions or discoveries made by scientists in industrial laboratories are, in general, either patented by the employer or the patents are taken out by the scientists and assigned to the employer. Moreover, the companies studied do not have a stated policy of paying more than a nominal amount to scientists for such inventions. Ten of the companies make some payment to the scientist; but the amounts provided range from \$1 to \$25, except in 4 laboratories where they range up to \$100. This apparently does not mean that larger payments are never made, but indicates

merely that the companies do not commit themselves to large payments for patents. Patents are considered by some companies as a factor in determining salary increases.

Nonproduction Bonuses

Nonproduction bonuses are paid by 11 companies, employing only slightly less than half of all scientists. In six companies, with 15 percent of the workers, all of the scientists share in the bonuses. In four companies, these payments are limited to those with an outstanding performance record. The amount of bonus paid to the individual is based on salary in a majority of the companies.

Insurance and Pension Plans⁵

Various types of insurance, paid for at least in part by the company, are provided. Life insurance is the most common type available, but accident and health insurance with weekly benefits is only slightly less common (table 3). Half of the companies studied, with half the scientists, provide both life and accident and health insurance.

TABLE 3.—*Insurance or pension plans provided for scientists in industrial research laboratories of 25 companies, 1949*

Type of plan	Number of companies	Percent of scientists
Companies having insurance or pension plans	125	100
Life insurance	123	79
Accident or death or dismemberment	8	32
Accident and health (weekly benefits)	13	74
Disability pension	11	64
Hospitalization	7	20
Surgical benefits	6	20
Doctors' hospital attendance benefits	2	10
Retirement pension	25	100

¹ Total companies; some have more than one type of insurance.

² The other 2 companies have company death-benefit plans.

Companies with over a third of the employment pay all costs of life insurance. The amount of insurance varies among individual scientists in all but two companies, depending in most cases on salary. Length of service and marital status are sometimes considered, either in addition to or to the exclusion of salary. The typical minimum amount of insurance provided is \$1,000 or \$1,500. The maximum is usually \$10,000 or \$20,000.

In 9 out of 13 cases, employees contribute to the cost of the insurance providing weekly benefits in case of accident or illness. The minimum weekly

benefit under these plans ranges from \$7 to \$21; the maximum is usually \$40. Scientists also frequently contribute to the cost of other types of insurance.

Formal retirement plans are in effect in all but one company. This company, with a small number of scientists, has an informal arrangement for retirement benefits. Of the formal plans, those covering nearly two-thirds of the scientists studied provide retirement either on the basis of age or for disability.

In 8 companies, with three-fifths of the employment, the employer alone contributed to the pension fund; in the remainder, contributions were joint. Where estimates were obtained, employer contributions ranged from 50 to 75 percent of the cost of the plan. Employee contributions typically ranged from 2 to 5 percent of salaries (depending in some cases on salary level).

The amount of both retirement and disability pensions is based on years of experience and salary level. In only one case are years of service disregarded in determining the amount of pension paid. Typical full annual pensions amount to about 1 percent of average annual salaries multiplied by years of service. Disability pensions are smaller than those provided at retirement age.

The retirement age for men to receive a full pension is 65 in almost all companies. Two companies set a minimum service requirement in addition to age—20 years in one and 25 in the other.

Reduced pensions are provided for employees retiring before they are eligible for a full pension, in all but one of the companies. The reduced-pension provision, in most instances, applies to those retiring at age 55. About half the companies set a minimum service requirement for reduced pensions, the amount of service varying from 10 to 25 years. Only one company limits pensions, before full retirement age, to cases of disability.

Vested rights to the payment of retirement benefits are given scientists in 19 companies (with half the employment studied), if they leave the company after a specified number of years of service, and in some cases, if they have also reached a certain age before they leave.⁶

In half of these companies, employing nearly a fourth of the scientists, the only factor in establishing these rights was length of service, ranging

⁵ Only plans paid for at least in part by the company are discussed here.

⁶ In all the companies that do not provide these rights, the employee makes no contribution to the retirement fund.

from 5 to 20 years. The other companies required employees to have at least 10 years of service and to be 45 years of age before acquiring vested rights.

In general, employees who meet these standards are entitled to their own contributions with interest if they wish to withdraw the money at the end of their employment. If the contributions are left with the company until retirement age, the employee has a right to the full retirement pension earned by the years of service to his credit.

Protective Benefits

Free physical examinations at the time scientists are employed were provided by 24 of the companies studied; all but 3 of these provided periodic examinations thereafter. In a few cases, periodic examinations are limited to certain groups of scientists. Almost all companies provide some free medical care beyond these examinations, but it is frequently limited to emergency care on the job. Almost half the companies give more than emergency aid. One company provides medical assistance, either free or at reduced cost, for the employee's family.

Conditions considered extra hazardous by the laboratory officials were reported by over half the companies, employing nearly three-fifths of the scientists. The types of hazards most frequently mentioned were handling of chemicals (often of unknown characteristics) and explosives, exposure to radioactivity, and work around high-pressure equipment.

Special provisions for the scientists subject to the extra hazards were reported by eight of these companies. A few companies provided more frequent physical examinations than would otherwise be available; one also rotated work under such conditions.

Some free work clothing was furnished by all but three of the laboratories, and five also provided certain additional work clothing at reduced cost. Free laundry of laboratory clothing was provided by all but five companies. The articles of clothing most frequently provided are aprons, coats, and gloves. In laboratories where scientists come in contact with explosives or other hazards, safety glasses, safety shoes, masks, goggles, rubbers, rubber gloves, and rubber aprons are commonly furnished.

Moving and Travel Expenses

Companies employing more than half of the scientists pay at least part of the moving expense incurred when scientists join the laboratory staff. In addition, companies with a third of the scientists provide subsistence for their own employees while they are seeking permanent living quarters. However, in recent years, the companies studied have had no program for housing new employees.

Without exception, the companies studied reported that they pay all reasonable expenses of employees traveling on company business. (For discussion of travel expenses for attendance at scientific meetings, see p. 371.) Twenty-two pay all travel expenses when scientists come for employment interviews, but generally only if the company requests the interview. The other companies either do not pay interview expenses or decide the procedure on an individual basis.

Written Contracts and Dismissal Pay

Written contracts governing conditions of employment are found in only a small proportion of the companies studied. Some have such contracts only with supervisors or scientists engaged in highly specialized research. The period covered is usually 1 year, with automatic renewal.

Definite provisions in employment agreements for notice upon termination of service protect employers and employees alike in five of the companies studied. One company guarantees employment for 1 year or pay in lieu of employment. After the year, either party may terminate the agreement upon 2 months' notice. Three months' notice was reported by two companies. Salary is the basis of the length of notice agreed upon in one company.

Companies with about three-fifths of the scientists studied have a definite policy of giving notice on termination of service even though they do not have signed employment agreements. One month's notice was reported by most of these companies.

In addition to the provisions for notice or pay in lieu of notice, over half the scientists studied were employed in companies having definite policies for dismissal payments. All the companies base the amount to be paid on length of service. Such payments are equal to the salary for a prescribed period, ranging from 1 week for 5 years' service to 3 months for more than 20 years' service.

Employment Outlook: Petroleum Production and Refining¹

EMPLOYMENT in both petroleum production and refining is expected to increase gradually during the next 5 to 10 years. This expectation is based on indications that the demand for petroleum products will increase in the future and that the supply of oil will be adequate for this period. The expected rise in employment, combined with replacement needs, will provide many job opportunities for new workers.

The petroleum industry in all of its branches currently gives employment to a total of about 1½ million persons. This industry produces gasoline used by 43 million cars and trucks, and by civilian and military aircraft; fuel oil used for heat and power; lubricants essential to the operation of modern machinery; asphalt for highway construction; and hundreds of other products ranging from insecticides to plastic materials.

To provide the huge quantities of petroleum products needed in our economy (39 billion barrels of petroleum have been produced in the United States since the oil industry was started in 1859), a large and complex industry with many specialized branches has been developed.

Petroleum production and refining, the basic branches of the industry, and the ones covered in this report, employed over 400,000 wage and salary workers in a wide range of jobs and in many different parts of the country at the end of 1949. Earnings are relatively high and many of the jobs require considerable skill. The outlook for employment in this industry is therefore of interest

¹ By Calman R. Winegarden and Sol Swerdlow of the Bureau's Occupational Outlook Branch. More detailed information on employment prospects by State and region as well as descriptions of the duties, training, earnings, and working conditions in the principal petroleum production and refining occupations will be contained in a forthcoming Bureau of Labor Statistics Bulletin.

to a great many workers and their families and to the communities in which they live, as well as to persons seeking employment or choosing a course of training that may later lead to a job.

At the end of 1949, considerably more than 200,000 wage and salary workers were employed in petroleum production. Employment is concentrated in certain States, although occurring to some extent in a number of others. Texas leads in the number of oil-field jobs, followed by Oklahoma, California, Louisiana, Kansas, Illinois, and Pennsylvania, in that order. An additional 11 States each provided 1,000 or more of these jobs in 1948.

Petroleum production includes three broad kinds of work. First is exploration. Since oil is difficult to find—only rarely are there any signs on the earth's surface of its presence underground—a sizable business has developed in the application of scientific methods to the search for oil. A second division of petroleum production is drilling, rig building, and other oil-field servicing. More than 39,000 wells were drilled in the United States in 1949. Texas was by far the most important State, both in number of wells and total footage drilled. Wells were drilled in 25 other States, led by Oklahoma, Kansas, Illinois, California, Louisiana, and Pennsylvania. More than half of the oil-field workers are engaged in operating and maintaining the Nation's 445,000 producing wells, the third broad division of petroleum production. There are over 4,000 oil fields in the United States, but 130 major fields accounted for half of the Nation's output in 1948.

Crude oil—petroleum as it comes from the ground—has very few uses. It is turned into hundreds of useful products by the process of refining. The 375 refineries in the United States employed about 200,000 wage and salary workers in the fall of 1949.² Refineries range in size from small plants, with less than 50 employees, to a relatively few large ones, each having several thousand workers on its pay roll. The 16 largest refineries accounted for nearly 40 percent of total capacity at the beginning of 1949.

Refineries are located with reference to two factors: proximity to markets and nearness to the supply of crude petroleum (near oil fields, at the terminals of oil pipelines, at deep water ports

² This figure includes employment in central administrative offices of integrated oil companies, even when these offices are located separately from refineries.

where tankers can dock). Refineries, therefore, tend to be concentrated in the great oil-producing or oil-consuming areas. Texas led in refinery jobs (with a fourth of the United States total in 1948) followed by California and Pennsylvania. Nine other States, of which Indiana, Louisiana, and New Jersey were the most important, each accounted for 1 percent or more of the total.

Factors Affecting Employment Outlook

Many factors affect the long-range outlook for employment in petroleum. Some of these are reasonably predictable, such as the generally rising demand for petroleum products. Other factors are fundamentally uncertain. No one can say, for example, exactly how much oil remains underground, where it is, or how long before it will be discovered. Another long-term uncertainty is the future role of competitive sources of energy. (How rapidly, for example, may atomic energy be adapted to peacetime uses?) The future is clouded in another respect. The petroleum industry is a world industry and its products are not only essential in the normal operations of our industrial society but also have critical military importance. Military and diplomatic factors, therefore, can greatly affect the outlook. Nevertheless, observable trends can be used in evaluating future job opportunities, subject to the qualifications noted.

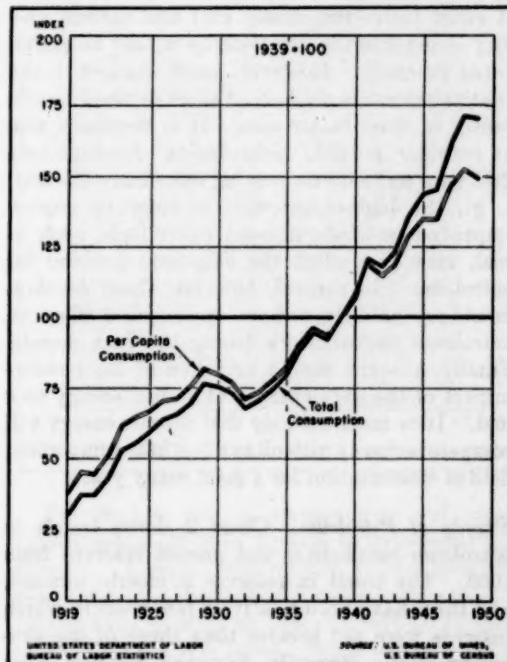
Demand for Petroleum Products. The long-range trend in demand for petroleum products has been sharply upward. Chart 1 shows the steeply rising demand for these products in the United States. Total domestic consumption in 1949 was nearly six times the 1919 level. It is also apparent from the chart that per capita consumption has nearly kept pace with the growth of total consumption, indicating that population growth, although a factor in the rising demand, has been less important than the intensified use of petroleum in our economy. The relative importance of petroleum as a source of energy has also risen greatly. At the turn of the century, crude oil accounted for only about 5 percent of energy produced; by 1948, the proportion had risen to nearly 35 percent.

Many factors have contributed to the growth of the petroleum industry. Undoubtedly the most important single element has been the rapid increase in the number of motor vehicles. In 1900,

about 4,000 automobiles were registered in the United States; in 1948, more than 43 million cars and trucks were registered. Residual fuel oil has become important as a source of energy for industrial heating and power generation, as well as for fueling ships and locomotives. Several million homes and other buildings are heated by distillate oils, and thousands of Diesel units use petroleum fuels. About 3 million petroleum-operated tractors are in use on the Nation's farms. Thousands of airplanes consume growing quantities of aviation gasoline. Large amounts of asphalt are used in road construction and maintenance. In recent years, there has been a rapid rise in importance of liquified petroleum gases as fuel for homes and industry. The development of petro-chemistry has created a multitude of new uses for petroleum. It is now an ingredient in many cosmetics, insecticides, medicines, paints, and plastics.

The rise in demand for petroleum products has been exceedingly sharp in recent years. Domestic consumption in 1949 was about 74 percent above the 1939 level. During the war, demand reached unprecedented heights; vast quantities of petro-

Chart 1. Trend of U. S. Petroleum Consumption



leum products (especially aviation gasoline) were required by the armed forces and by war industries. Following the war, a further sharp increase in demand occurred. This unexpected development placed great strain on petroleum refining and transportation facilities, so that in 1946 and 1947 there were local, temporary shortages of fuel oil and gasoline (particularly the former). But in 1948 and 1949, petroleum supplies were ample.

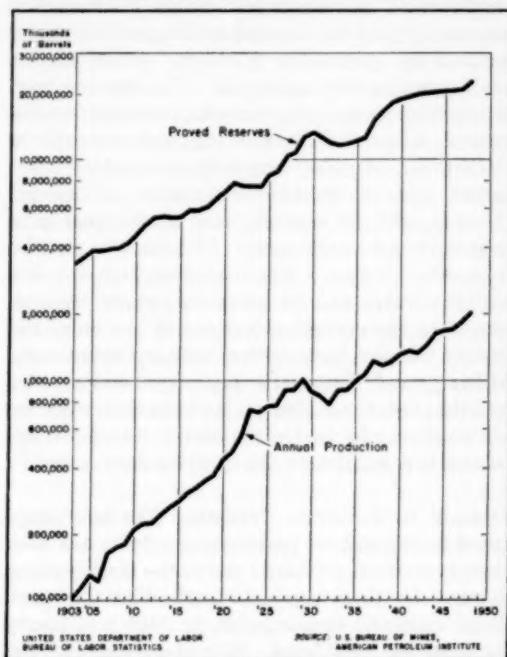
All indications point to a continued and fairly rapid rise in demand during the next 5 or 10 years. Most of the factors responsible for past growth should continue to operate—rising number of motor vehicles, growth of military and civilian aviation, increased use of oil in heating, wider application of the Diesel engine, greater use of petroleum byproducts and, finally, continued growth of United States population and industry. On the other hand, exports of petroleum may continue their recent decline, partly because of increased refinery capacity in Europe, utilizing crude petroleum from the Middle East, and thus reducing demand for United States oil.

The effects of several general factors in the demand for petroleum are difficult to gauge. One of these is the price of petroleum relative to that of other fuels—principally coal and natural gas. Any changes in this relationship cannot be anticipated precisely. However, small changes in the relative prices are unlikely to affect demand significantly in most major uses. It is necessary also to consider possible technological developments that may make oil-consuming units more efficient, e. g., the high-compression automotive engine. Improved methods of using other fuels, such as coal, may also affect the long-term demand for petroleum. In general, however, these developments are unlikely to have any marked effect on petroleum requirements during the next decade. Finally, account should be taken of the possible impact of the development of atomic energy as a fuel. It is most unlikely that atomic energy will compete seriously with oil as a fuel in any important field of consumption for a good many years.

Supply of Petroleum. Chart 2 shows trends in petroleum production and proved reserves from 1903. The trend in reserves is clearly upward, and there have been relatively few years in which reserves were not greater than those of the preceding year. Recently, however, reserves have

been rising at a diminishing rate, and the gap between reserves and production has narrowed somewhat. At the end of 1948, estimated proved reserves in the United States were over 23 billion barrels (crude petroleum). In addition, reserves of natural gas liquids totaled about 3.5 billion barrels. It is estimated that another 2 to 5 billion barrels of oil are recoverable by the application of secondary recovery techniques in the older fields.³ It should be noted, however, that proved

Chart 2. Growth of Petroleum Production and Reserves



reserves do not represent the total supply of oil. ("Proved reserves" refers only to the estimated amount of oil which has been discovered, which remains underground, and which is recoverable by present methods of production.) If the oil believed to be present, but not yet discovered, is added to the proved reserves, upwards of 60 billion barrels of "ultimate reserves" remain, according to one estimate.

The worldwide scope of the petroleum industry makes it necessary to consider, in addition to the

³ "Secondary recovery" refers to a variety of technical methods for increasing the proportion of oil which can be obtained from a particular pool.

domestic supply, foreign sources of petroleum, even though future access to some of these sources is uncertain. Crude reserves in the Western Hemisphere outside the United States are estimated at 11 billion barrels, most of it in Venezuela. Eastern Hemisphere proved reserves amount to 37 billion barrels, located mainly in the Middle East. Proved reserves of the entire world were estimated to be 70 billion barrels at the beginning of 1948.

More effective conservation methods are stretching our oil supplies. In the early days of the industry, wastage was considerable through the uncontrolled "flush" production of wells. In recent years, the rate at which oil is withdrawn from the ground has been controlled by State action or by voluntary agreements of petroleum producers, thereby increasing the ultimate amount of oil recoverable from each pool. Moreover, this control of the rate of output, or "prorationing," has prevented temporary over-production of petroleum and consequent waste.

Considerable attention has been given in recent years to the possibility of producing large quantities of synthetic petroleum. The main sources of synthetic petroleum in the United States are oil-bearing shale, natural gas, and coal. Although techniques have been developed to obtain oil from each of these three substances, the methods have not yet become commercially feasible. However, if an oil scarcity approaches or if national defense considerations require, large-scale development of the synthetic petroleum industry is likely. It is believed that known deposits of oil-bearing shale contain billions of barrels of petroleum. The coal supplies of this country are virtually inexhaustible and an almost endless amount of oil could be produced by large-scale synthesizing of coal into petroleum.

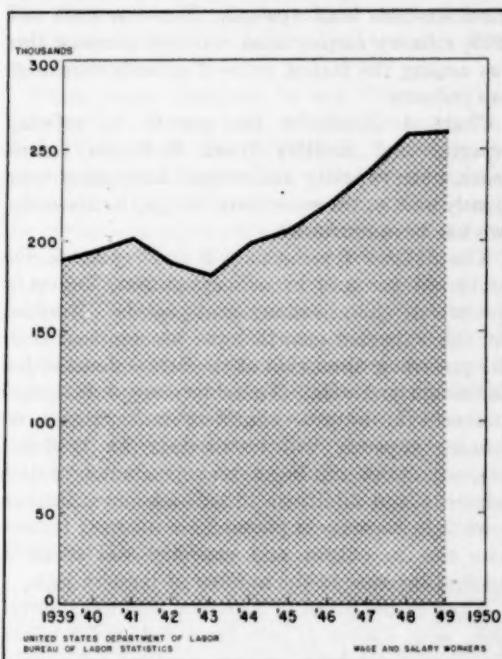
In conclusion, it appears that although oil may eventually become scarce in the United States, its supply is adequate to permit a high and rising level of employment in petroleum production and refining for a number of years.

Job Prospects

Petroleum Production. Chart 3 shows the recent trend of employment in the Nation's oil fields. It can be seen that the 1949 level was considerably above prewar. Over the next 5 to 10 years, the number of jobs is expected to increase gradually.

In 1948-49, oil-field activity was at the highest levels in history. The main factors in this peak rate have been the record demand for petroleum, the backlog in exploration and drilling resulting from wartime restrictions, and the fact that it has become necessary to drill more deeply, on the average, to find oil. The doubling of the price of crude petroleum between 1946 and 1948 also contributed to the stepping up of exploration and drilling. Because of growing demand, production of crude petroleum during the next decade should exceed the record 2 billion barrels produced in 1948, bringing an increase in the number of producing wells and fields. This increase, along with the trend toward deeper drilling, should mean a growing number of oil-field jobs.

Chart 3. Employment in Crude Petroleum and Natural Gas Production



The gradual rise in employment will create opportunities for new workers in petroleum production. A much larger number of jobs, however, will result from replacement needs. In a field of employment as large as this one, annual replacement needs are very substantial. The number of

workers who die, retire, or transfer to other work each year may run into many thousands.

Various kinds of workers will be needed in oil production. Most of the new workers will start as laborers, roustabouts, or helpers. In addition, however, a large number of openings are anticipated for petroleum engineers, geologists, geophysicists, surveyors, draftsmen, and other technical workers.

Although many uncertainties cloud the outlook beyond the next decade, those who do obtain jobs in petroleum production during the next 5 or 10 years will probably continue to hold them over a much longer period.

Petroleum Refining. Refinery employment in 1948-49 was the highest ever attained in the industry. Much of the increase has occurred in the last several years. However, the long-range trend has also been upward. Between 1909 and 1939, refinery employment rose 500 percent; this was among the fastest rates of growth shown by any industry.

Chart 4 illustrates the growth of refining capacity and activity from 1918. In recent years, both capacity and output have risen very greatly and, at the same time, the gap between the two has been narrowed.

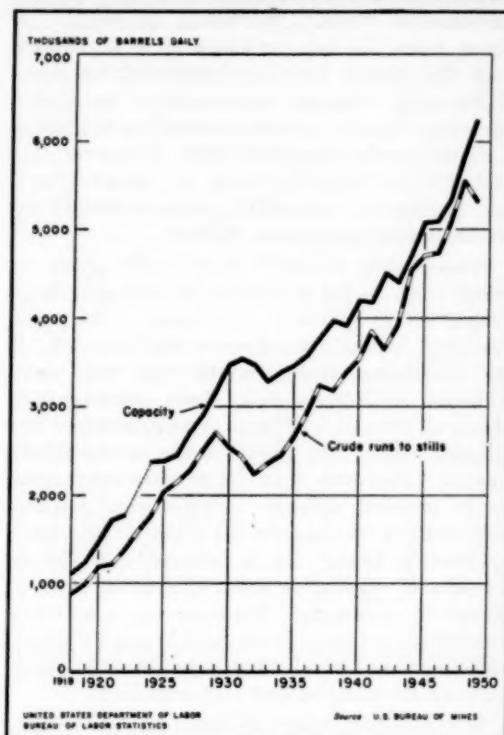
The outlook for the next 5 or 10 years is for continued advance in refinery output, but at a slower rate than in many past periods. Reasons for this expected growth have been indicated in the preceding discussion of the future demand for petroleum products. To achieve any substantial increases in output, considerable expansion of refining capacity will be needed. In 1948-49, extensive work was begun on construction of new refineries and additions to existing ones; further growth in capacity is planned for the near future. The rise in output and capacity will mean a marked increase in the number of refinery jobs.

Even in the event of a general business depression, with output of petroleum falling far below the expected levels, refinery employment should not decline greatly, because such employment is more closely related to changes in capacity than to variations in output. A refinery may be operated at widely varying rates without greatly affecting the total number of workers needed. A large share of refinery employment is in maintenance departments, which have nearly as much

work to do when the refinery is operating at 70 percent of capacity as at 90 percent. The number of administrative, technical, and clerical employees is also fairly stable, regardless of the rate of production. Finally, processing jobs involve mainly the tending of types of equipment which require a relatively fixed number of workers.

In addition to the many job opportunities resulting from expected expansion in refining, replacement needs (resulting from death, retire-

Chart 4. Petroleum Refining Capacity and Output



ment, and transfers into other industries) will provide numerous openings for new workers. Most new plant workers will start as laborers, since the usual practice in refineries is to fill the more skilled jobs by promoting from within.

There will also be many opportunities in technical jobs, especially for chemists, chemical engineers, mechanical engineers, and laboratory technicians. Accountants, bookkeepers, stenographers, typists, and various kinds of clerical workers will also be needed.

Summaries of Studies and Reports

Full Employment Report by UN Experts¹

UNEMPLOYMENT resulting from a deficiency of effective demand is regarded as the major type of unemployment in industrialized countries, according to experts from four nations, reporting to the United Nations.² They were requested by the UN Secretary-General to report on national and international measures required to achieve full employment. Unemployment due to deficiency of demand is the chief concern of the report; other types, resulting from lack of capital equipment, or from structural features of the economy, are noted in passing.

The measures recommended, the experts assert, are consistent with the institutions in free enterprise economies, although a good deal of government action is involved. The plans proposed leave to each government the definition of the level of employment which it proposes to maintain. Full employment, they believe, can only exist in "an expanding world economy of which the economic development of under-developed countries would form the most important single element."

The report proposes measures to implement Articles 55 and 56 of the United Nations Charter in which "All members pledge themselves to take joint and separate action in cooperation with the Organization for the achievement of (a) higher standards of living, full employment and conditions of economic and social progress and development * * *." In adopting the Employ-

¹ National and International Measures for Full Employment, Report by a Group of Experts appointed by the Secretary-General of the UN (E/1584 December 22, 1949, UN Publication Sales No. 1949 II.A.3, 75 cents) and Report of Fifth Session ECOSOC Economic and Employment Commission (general E/1600, E/CN.1-79 January 31, 1950).

² John Maurice Clark, Professor of Economics at Columbia University, New York; Arthur Smithies, Professor of Economics at Harvard University; Nicholas Kaldor, Fellow of King's College, Cambridge; Pierre Uri, Economic and Financial Adviser to the Commissariat general du Plan, Paris; E. Ronald Walker, Economic Adviser to the Australian Department of External Affairs.

ment Act of 1946, the United States has already recognized its general obligation in this field.

After a period of high postwar employment, signs of a recession in 1948-49 in various countries aroused international concern, pointed up the lack of concerted means for warding off an incipient depression, and created an atmosphere of urgency in which the present report was prepared, between October and December 1949. A questionnaire, circulated to member governments by the Secretary-General of the UN last summer, showed "considerable differences in the promptness and effectiveness" of measures which these governments would be able to take to deal with the onset of a depression.³

While many members of the Economic and Employment Commission of the Economic and Social Council of UN (ECOSOC), reviewing the report, registered agreement with the general objectives and with numerous recommendations in the report, questions were raised concerning some of the proposals. ECOSOC voted on February 21 to refer the report to member governments for study. These governments are invited to express their views on the experts' proposals or to submit any alternative proposals they may have for solving unemployment problems to the next ECOSOC meeting in Geneva in July-August 1950. The principal recommendations of the experts, together with the Commission's discussion of them are summarized below.

Domestic Measures

(1) *Full employment target and compensatory measures.* Each member government should announce a full employment target, and a comprehensive program for achieving this objective (including fiscal and monetary policies, investment and production planning, and wage-price and anti-monopoly policies); each government should also

³ See Maintenance of Full Employment (UN Sales No. 1949 II.A.2) and documents E/1111 and E/1111 Addenda 1-6.

announce a system of compensatory measures to expand effective demand, to be invoked whenever unemployment exceeds a prescribed limit for three successive months.

Industrialized countries would, according to the report, set this target in the form of a percentage of unemployment among wage earners. Some members of the ECOSOC Employment Commission, however, criticized this goal as too narrow and suggested instead "a total level of employment, production, and national income."

"The precise formulation of the target, whether based on employment or unemployment, whether expressed in absolute or in percentage figures, must be at the discretion of the governments," said the Commission.

(2) *Coordination of all government activities affecting the employment level.* Governments, the experts advise, should review and re-state the whole range of measures which they intend to take to promote full employment and economic stability. Furthermore, the report states:

In many countries a long-term program for the expansion of consumption could be carried out by employing the instruments of fiscal policy discussed above: i. e., by changing the incidence of taxation and lowering its level; by expanding programs of social security and transfer payments; by raising the standards of social expenditures generally, for education, health, etc.; and by means of other supports to personal consumption. Furthermore, the control of monopoly prices may serve the purpose of increasing consumer demand through the reduction of profit margins.

The Employment Commission "agrees with the experts that, depending on the nature of the economies of individual countries, government expenditures and tax policies, control of the volume of investment, and stimulation of consumption may all find an important place in continuing programs."

Commodity stabilization schemes will be required, according to the experts' report, to maintain the income of primary producers, both at national and international levels; national schemes, however, might be of limited usefulness in countries with a weak balance-of-payments position. The Commission recommended more study of this entire question.

The Secretary-General of the UN, at the request of the Council, is collecting reports from govern-

ments on measures taken to achieve full employment. Regular analytical summaries of these reports are to be released, starting in July-August 1950.

(3) *Automatic compensatory measures.* Whenever unemployment exceeds the range defined in the target by some predetermined amount for three consecutive months,⁴ countermeasures announced in advance should automatically come into effect. The measures should quickly produce an expansion in effective demand throughout the economy, sufficient to reduce the level of unemployment below the prescribed limit. Among the possible measures suggested are alternative tax schedules (e. g., reducing the rate or raising the level of exemption for income tax purposes); or variations in social security contributions. The ECOSOC Employment Commission approved in principle "built-in stabilizers" such as farm-price support programs and certain features of social security systems, but had some reservations concerning the automatic operation of measures formulated in advance, as recommended by the experts. Some members believe that such measures would be useful chiefly in offsetting unemployment in consumption-goods industries.

Public works programs could not be varied rapidly enough, in the experts' opinion, to be useful as an automatic compensatory device, although they constitute an important part of a continuing stabilization program.

(4) *Preventing inflation.* On the subject of wages, the report says:

If there is evidence of a continuous general upward pressure of money wages exceeding substantially the rate of increase of productivity and leading to offsetting price increases, the situation requires such action by the government, jointly with organized labor and employers' associations, as would ensure that any wage increases that may be granted will not result in a general price inflation. The character of the action to be taken would naturally depend on the conditions ruling in each country.

In the opinion of the ECOSOC Employment Commission, the experts tended to underestimate the difficulties of checking upward movements of prices and wages arising out of labor shortages and inflationary pressures.

⁴ The target can be adjusted to allow for normal seasonal variations in employment.

Some members felt that the experts had given insufficient emphasis to wage-price relationships and antimonopoly policies. A separate statement by Prof. J. M. Clark, annexed to the report, calls for more study of the effect of wage and price levels on employment levels.

(5) *Governmental machinery.* The report does not deal fully with the methods that governments are to use in putting the recommended measures into motion—especially those governments with constitutionally defined powers and intricate relationships between Federal, State, and local levels. Again, the difficulties are rather lightly dismissed, in the view of some Commission members.

Improved statistical services will certainly be needed. The experts urge governments to publish at regular intervals, comprehensive data on employment and unemployment by major industrial groups, areas, and categories of workers (e. g., skilled, unskilled, white-collar employees, etc.). The collection and interpretation of statistics of all the principal aggregates that determine the level of effective demand are also needed. The Commission urged that the UN Secretariat and specialized agencies be prepared to assist the governments.

International Measures

Some of the most far-reaching measures recommended in the experts' report are international in scope, and on these, the ECOSOC Commission members registered their greatest misgivings. "The experts have properly emphasized the importance of developing and harmonizing policies aimed at achieving an enduring equilibrium in international payments as soon as possible. The Commission, however, is uncertain as to the practicability of the particular proposals advanced by the experts for achieving this objective." The proposals include the following:

(1) Both deficit and surplus countries, as a first step, should set targets for the main items in their balances of payments. Deficit countries should declare the amount by which they wish to raise the proceeds of their exports, or reduce their payments for imports. Surplus countries should declare the amount by which they wish to raise their payments for imports, and reduce their exports, and should pledge themselves to the

amount of long-term lending they wish to undertake on a continuing basis.

Governments should then consult and negotiate to iron out any inconsistencies which these announced programs disclose. In the opinion of the experts, governments should "also be prepared to adjust their production structures where necessary, in cooperation with each other, to the needs of those potential markets which in the light of the prospective situation are needed to balance the international accounts."

(2) Methods for increasing the flow of investment to under-developed countries, channeled through governments and the International Bank for Reconstruction and Development, were dealt with in another set of recommendations. Lending countries are asked to fix annual targets for 5-year periods for international investment comprising both private and public funds.

(3) Measures were proposed for stabilizing the flow of international trade, in order to prevent the propagation from country to country of unemployment resulting from cyclical variations in effective demands. These proposals met with some skepticism on the part of the Commission as to their practicality, not intent. The experts' plan would require "each country to stabilize its own external currency disbursements on current account in the event of a decline in its own demand for foreign goods and services" by (a) special measures to maintain its imports, e. g., stockpiling; (b) by replenishing the monetary reserves of the other countries, insofar as the depletion of those reserves results from shrinkage of its imports from them. This operation could be performed, the experts believe, through the International Monetary Fund, after adoption of an enabling amendment to its articles of agreement. The object of these proposals is to prevent a cumulative contraction in international trade.

The Commission drew attention to the difficulty of attributing a particular part of a balance-of-payments deficit to cyclical depression in specific countries. Some members questioned whether countries would be willing and able to commit themselves in advance to a series of indeterminate payments which might be quite sizable. They also questioned whether the automatic financing of imports would not retard necessary adjustments in the purchasing countries to structural changes in international trade.

Statistics of Insured Unemployment Under State Programs¹

THE RISE in the number of unemployed persons in the United States over the past year has intensified public interest in the geographical distribution of unemployment. National estimates of total unemployment are provided on a current basis by the Census Bureau's Monthly Report on the Labor Force, but no comparable estimates are currently available for States or regions. In the absence of such data, the statistics of insured unemployment under State programs do, however, provide useful information on geographical differences in unemployment for a major segment of the Nation's labor force and, beginning with this issue, will be carried as table A-11 in the Current Labor Statistics section of the Review.

Source and Derivation of the Data

The data on insured unemployment are obtained as a byproduct of the operations of the State unemployment compensation programs.² When a worker covered by State unemployment insurance becomes unemployed, he reports to a local office of his State employment security agency and files an "initial claim" for benefits (simply a notice of the beginning of a period of unemployment). In each subsequent week (or biweekly in certain States), the unemployed worker files a "continued claim,"³ representing unemployment in the preceding week or weeks. In addition to those totally unemployed, some persons working part-time may be eligible for unemployment compensation and are included in the continued claims totals.

The number of weeks of unemployment covered by continued claims is reported by the State agencies to the U. S. Department of Labor's Bureau of Employment Security. The *insured unemployment* series is derived by adjusting the continued claims data for the lag between the week of unemployment and the time the claim is filed, so that the adjusted series refers to the

¹ By Calman R. Winegarden of the Bureau's Branch of Manpower Studies.

² The Federal-State unemployment compensation system is described in an article, *Insurance Against Unemployment in the United States*, Monthly Labor Review, January 1950 (p. 9).

³ The claim may be for a "waiting period," in order to qualify for benefits, or may be for a "compensable week," for which benefits are payable. Not all compensable claims result in payment of benefits; a small proportion of claimants do not qualify under the State laws.

week in which unemployment actually occurred. The monthly data on insured unemployment, shown in table A-11 (p. 452), are averages of the figures for the weeks ending in each month.⁴

Comparability With Census Estimates

Insured unemployment under State programs cannot be compared directly with Census Bureau estimates of total unemployment based on the Monthly Report on the Labor Force and on the decennial Censuses of Population.

State unemployment insurance programs exclude from coverage certain industries and classes of workers. The main groups not covered are agricultural workers, government employees, the self-employed, domestic servants, workers in very small firms (in most States), employees of non-profit organizations, and railroad workers (who have a separate unemployment insurance system under the Railroad Retirement Board). Groups not covered account for nearly half of total employment in the United States. In general, persons in any of these groups who become unemployed are not included in the statistics of insured unemployment. Also excluded are new entrants into the labor force, and workers with insufficient covered employment or earnings prior to lay-off.

Moreover, unemployed persons who have exhausted their benefit rights do not appear in the insured unemployment figures. Benefits are payable in most States for a maximum of 20 to 26 weeks in a 12-month period. In times of prolonged unemployment, the exhaustions of benefit rights could cause a marked divergence between the trends of insured unemployment and total unemployment.

The data on insured unemployment under State programs also exclude unemployed veterans of World War II claiming Servicemen's Readjustment Allowances. Currently, this is a small group—about 65,000 per week in January 1950. Prior to July 1949, when most veterans ceased to be eligible for these allowances, the volume of claims was much larger. In March 1949, for example, about 700,000 veterans were filing weekly claims for servicemen's unemployment allowances.

Apart from the exclusion of certain groups of workers from the insured unemployment statistics,

⁴ Weekly statistics of insured unemployed are issued by the Bureau of Employment Security in mimeographed releases on "Insured Unemployment."

there are other incomparabilities with Census estimates, arising largely from differences in the definitions of unemployment. Counted among the "insured unemployed" are workers who may file claims and be eligible for State unemployment compensation but who are classed as "employed" in the Census data. Included in this category are: Persons not working because of bad weather; workers on temporary lay-off with definite instructions to return to work in less than 30 days; those waiting to enter new jobs or businesses within 30 days; and certain part-time workers. In addition, sampling variations may influence the current Census estimates shown in the MRLF.

Other Limitations

Statistics on insured unemployment, although excluding some large groups of unemployed persons, provide a current source of information on the geographic distribution of unemployment and on unemployment trends in the various States. However, there are certain additional limitations, which affect the use of the data in making interstate comparisons of unemployment levels and in interpreting month-to-month changes. These limitations arise primarily from variations in State unemployment compensation laws, particularly with respect to coverage, duration of benefits, and timing of the benefit year. Changes in State laws and operating practices also affect the comparability of the data over time.*

Coverage. The proportions of total employment covered by unemployment compensation programs vary among States. In part, this reflects interstate differences in industrial composition; for example, in largely agricultural States, a smaller fraction of the labor force is covered than in highly industrialized States. In addition, the coverage provisions of State laws vary somewhat, particularly regarding size of firm. In 22 States, firms with fewer than 8 employees are exempt from unemployment compensation laws; but in 15 States, there are no exclusions based on number of employees. The remaining States cover firms with a minimum of from 3 to 6 employees.

Duration of benefits. State variations in the maximum length of the benefit period affect the insured

unemployment series because of the differential effects of exhaustions. In 8 States, the maximum benefit period for a totally unemployed worker ranges from 12 to 18 weeks. In 28 States, the maximums are from 20 to 25 weeks, and in 12 States, 26 weeks. In one State, Wisconsin, benefits may run to 26½ weeks. There are also differences in the qualifications for receiving benefits for the maximum period.

The Benefit Year. The timing of the "benefit year" has a pronounced effect on the insured unemployment data for certain States. A benefit year is a 12-month period in which a worker's eligibility for unemployment compensation is determined by the amount of covered employment or earnings to his credit in a particular past, or "base", period. If the compensation rights are used up before the end of the benefit year, the unemployed worker must wait for the beginning of a new benefit year, when he becomes eligible for benefits resulting from any covered employment or earnings following the end of the former base period. The benefit year in most States begins with the date on which the individual files his claim; in these States, the beginning of new benefit periods tends to be spread throughout the year and does not greatly affect the insured unemployment series. In 13 States, however, a "uniform" benefit period is used, most frequently beginning on April 1.* As a result, at the start of the new benefit year, a sharp rise often occurs in the numbers of insured unemployed; this represents, however, the filing of claims by workers becoming eligible for benefits in the new year, rather than any increase in unemployment.

Operational Factors. Month-to-month changes in insured unemployment may be influenced by various administrative factors, as well as by the provisions of the State unemployment insurance laws. For example, the occurrence of a legal holiday in any week may postpone claims-filing by some unemployed workers to the following week. If the holiday falls in the first week of a month, the result may be an understatement of insured unemployment for the preceding month and an overstatement for the current month.

* This discussion of the provisions of the State laws is based on the Bureau of Employment Security's Comparison of State Unemployment Compensation Laws as of September 1949, and does not take account of any subsequent changes.

* States with uniform benefit years, beginning in the month specified, are as follows: *April*—Colorado, Illinois, Maine, Maryland, Massachusetts, New Hampshire, Rhode Island, and Vermont; *May*—Virginia; *June*—New York; and *July*—Idaho, Oregon, and Washington.

Dismissal-Pay Provisions in Union Agreements, 1949¹

ALLEVIATION OF HARDSHIP resulting from loss of employment due to factors beyond a worker's control has long been a subject of collective bargaining. Accordingly, labor-management contracts have included provisions ranging from notice of a specified duration to employees before lay-off to substantial lump-sum payments to workers separated from their jobs, and pensions to aged or permanently disabled workers.

Dismissal (or severance) pay is a sum of money, in addition to any accrued wages or salaries for past work, paid to an individual whose employment is terminated through no fault of his own.² The most common objective of dismissal-pay plans has been, of course, to ease the employee's financial burden, while he is looking for a new job. Other objectives include the provision of partial compensation to the separated worker for retraining or acquiring new skills, and the maintenance of good will of employees and the community generally.

Relatively few labor-management agreements, however, currently include specific severance- or dismissal-pay clauses. A recently completed Bureau of Labor Statistics analysis of a sample of over 2,100 agreements showed that only 168, or 8 percent of the contracts studied, stipulated that workers losing their jobs through no fault of their own should receive separation allowances.

There are some indications, however, that the proportion of agreements providing for dismissal pay is increasing slightly. A survey conducted by the Bureau in 1944 showed but 5 percent containing dismissal-pay provisions.³ Prior to World War II, a scattering of dismissal-pay clauses had been negotiated. One of the more significant of

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This study was based on an analysis of 2,137 agreements; of which 1,584 were in manufacturing industries. All these agreements were in effect in 1949, and covered, in the aggregate, more than 3½ million workers.

² "Dismissal Pay," as provided in collective bargaining agreements, is also known by various other terms such as "service awards," "lay-off bonus," "termination allowance," etc. Pay granted in lieu of a prescribed lay-off notice is not generally considered to be dismissal pay, and such provisions are not included in this study.

For a wide variety of illustrative clauses, see Bureau of Labor Statistics Bulletin No. 908-5; *Collective Bargaining Provisions—Discharge, Discipline, and Quits; Dismissal Pay Provisions*. Washington, 1948.

³ Bureau of Labor Statistics Bulletin No. 808; *Dismissal Pay Provisions in Union Agreements*, December 1944. Washington, 1945.

these was a Nation-wide "job protection agreement," concluded by a number of railroad unions and carriers (in 1936) to protect workers displaced by the consolidation, merger, or coordination of rail facilities.⁴ A decade earlier (1926), the Amalgamated Clothing Workers and the Hart, Schaffner and Marx Co. negotiated a provision for payment of a \$500 dismissal wage to cutters losing their jobs because of technological changes. Also, some employers of their own accord established dismissal-pay plans in the 1920's; but relatively few plans antedated World War I.⁵

In the current survey, dismissal-pay provisions, although found in many industries, were relatively concentrated in the agreements of only a few. About 75 percent of the 27 agreements analyzed in the communications industry and 60 percent of the 46 in the rubber industry contained such provisions (most of these cover plants of the four largest rubber companies). Slightly more than half of the 63 agreements in the printing and publishing industry (primarily newspapers) provided for dismissal pay. In the iron and steel industry, dismissal compensation was allowed by 12 percent of the agreements.⁶ Other industry groups in which at least 10 percent of the agreements surveyed included dismissal-pay provisions were petroleum and coal products; electrical machinery; chemicals; mining and crude-petroleum production; and banks, insurance companies, and other types of office employment.

Dismissal-pay provisions were written into the agreements of 41 national or international unions. Of these, 17 were affiliated with the AFL and 16 with the CIO. The remaining 8 were unaffiliated unions. Among the individual unions, dismissal-pay provisions appeared most frequently in contracts of the American Newspaper Guild (CIO),

⁴ Under the terms of this agreement, workers can elect to receive either a "coordination allowance," which spreads payments to displaced workers over a period of months, or a "separation allowance," which entitles them to receive a cash lump-sum settlement. Workers electing to take the coordination allowance are paid 60 percent of their average monthly earnings (computed over the preceding year), for periods ranging from 6 months for employees with 1 year's service to 60 months for employees with 15 or more years of service. Workers who choose to take the separation allowance receive lump-sum payments ranging from 3 months' pay for employees with 1 year's service to 12 months' pay for those with 5 or more years' service. Employees with less than 1 year's service receive 5 days' pay for each month in which they worked.

⁵ See *Studies in Personnel Policy No. 1, Dismissal Compensation*, National Industrial Conference Board, New York, 1937.

⁶ Among these were agreements covering subsidiaries of the U. S. Steel Corp., and other major companies in the industry.

Communications Workers of America (CIO), United Rubber Workers (CIO), United Steelworkers (CIO), International Typographical Union (AFL), International Printing Pressmen and Assistants' Union (AFL), and the United Office and Professional Workers (affiliated with the CIO on the date of the survey). In the collective-bargaining procedure of the American Newspaper Guild, dismissal pay is a standard feature, with 201 of the 202 Guild contracts in effect in December 1949 containing severance-pay provisions.⁷

Conditions and Amounts of Dismissal Pay

Dismissal-pay clauses vary widely with respect to the causes or conditions under which such compensation is paid, the amount and computation of the allowance, and the length of service required for eligibility to receive it.

Conditions Governing Payments. Most agreements set forth the conditions under which workers can expect to receive separation allowances. In 89 of the 168 agreements analyzed, the clauses simply stated that dismissal for "lack of work" or "reasons beyond the worker's control" was sufficient to qualify an employee for a separation allowance. These, as well as other clauses, generally provided that the allowance was not payable if the discharge was self-provoked or for causes such as dishonesty or gross neglect of duty. Many clauses were more explicit, however. A large number of agreements directly or indirectly related the dismissal-pay plan to technological changes. Mergers, consolidations, changes in manufacturing processes, shut-downs of the plant or a department, etc., were among the reasons cited. In still another group, primary emphasis was placed upon the inability of individual workers to meet the requirements of the job. Aged workers who were not eligible for pensions were in this category.

⁷ Supplement to 1949 Contracts Survey, American Newspaper Guild, New York, December 10, 1949. According to this report, the Guild contracts usually specify a uniform relationship between severance pay and length of service, such as a week's pay for each 6 months' or year's service. The maximum allowances range from 2 to 60 weeks' pay; about half of the agreements establish maxima of 25, 28, or 30 weeks. About 10 percent of the Guild agreements place no maximum limit on the amount of dismissal pay which can be accrued. Pay is usually allowed for all dismissals except those resulting from gross misconduct, neglect of duty, and similar serious offenses.

Service Required and Pay; Graduated Plans. Plans which scaled the amount of dismissal pay to the worker's length of service were most widespread, 150 of the 168 dismissal plans being of this nature. Such plans usually established minimum length of service standards of 6 months or 1 year. In some, the required qualifying period was shorter; in others, it was longer, up to 5 or 10 years (see table).

For 67 of the agreements studied, the minimum amount of dismissal pay was equivalent to 1 week's earnings. Almost an equal number (66) provided a minimum of more than a week's pay: among these, 16 called for 2 weeks', 20 (mostly in steel) for 4 weeks', and another 16 (primarily in rubber) for 10 weeks' pay.

Maximum pay and length of service provisions varied even more widely. Of the 150 graduated plans, 91 set an upper limit to the amount of separation pay which could be earned over a time span which ranged up to 35 years. With few exceptions, the maximum amounts called for the equivalent of at least 2 or more weeks' pay. Over half (54) of the 91 plans specified maximum payments of 8 weeks or more, some as much as a half-year or more.

The amount of dismissal pay was not limited in 59 agreements. In this group, a frequent relationship between pay and service was to grant 1 week's pay for each completed year of service. In other agreements, 1 week's pay was allowed for each year of service up to a specified number of years; thereafter the ratio of weeks of pay to length of service changed at stated intervals. The following clause is illustrative:

Each regular employee laid off will be paid a lay-off allowance in accordance with the following:

An employee with 5 years of service or less will be paid 1 week's pay for each year of service.

An employee with more than 5 but not more than 10 years' service will be paid 1 week's pay for each of the first 5 years and 2 weeks' pay for each year thereafter.

An employee with more than 10 but not more than 15 years' service will be paid 1 week's pay for each of the first 5 years, 2 weeks' pay for each of the next 5 years, and 3 weeks' pay for each year thereafter.

An employee with more than 15 years of service will be paid 1 week's pay for each of the first 5 years, 2 weeks' pay for each of the next 5 years, 3 weeks'

pay for each of the next 5 years, and 4 weeks' pay for each year thereafter.

[This clause would entitle a worker dismissed after 20 years' service, for example, to an aggregate of 50 weeks' pay.]

Uniform Plans. Under a uniform plan, a specified minimum length of service may be necessary to qualify for dismissal pay, but all employees who qualify receive the same amount, regardless of differences in length of service. Such plans were found in only 18 agreements. The following clause is illustrative of the uniform type of plan:

Any employee with 1 or more years' seniority who is dismissed due to lack of work as a result of curtailment of production quotas in this plant, or for

health reasons, and for these reasons only, will receive 1 week's severance pay of forty (40) hours computed at his then current hourly rate (unless a different workweek be established during the term of this agreement).

The amount most frequently allowed under the 18 uniform plans was 2 weeks' pay. This was specified by 11 of the agreements. Four weeks' pay was allowed by 4 agreements, and 1 week's pay by the remaining 3. A third of the 18 uniform plans allowed dismissal pay only to employees with at least 1 year of service, while 4 agreements required only 6 months to qualify. The remaining 8 agreements did not specify any service requirement.

Pay and service provisions under graduated types of dismissal-pay plans

MINIMUM PAYMENT AND SERVICE REQUIRED

Provisions	Number of agreements	Provisions	Number of agreements	Provisions	Number of agreements
Total	145	2 weeks' pay	16	4 weeks' pay	20
Less than 1 week's pay	12	3 months' service	1	6 months' service	1
1 month to 1 year's service	12	6 months' service	8	3 years' service	15
1 week's pay	67	1 year's service	1	5 years' service	1
3 to 4 months' service	2	2 years' service	4	5 weeks' pay	8
6 months' service	15	5 years' service	1	5 years' service	8
8 months' service	2	Service requirement not indicated	1	6 weeks' pay	2
1 year's service	43	3 weeks' pay	2	6 months' service	2
2 years' service	6	2 years' service	1	8 weeks' pay	2
		3 years' service	1	2 years' service	2
				10 weeks' pay	16
				10 years' service	16

MAXIMUM PAYMENT AND SERVICE REQUIRED

Total	147	8 weeks' pay	23	26 weeks' pay	2
20 hours' pay	1	8 years' service	2	12 years' service	1
9 months' service	1	10 years' service	19	26 years' service	1
1 week's pay	3	11 years' service	1	28 weeks' pay	3
1 year's service	2	15 years' service	1	12½ years' service	1
5 years' service	1	10 weeks' pay	4	18½ years' service	2
2 weeks' pay	20	6 years' service	1	30 weeks' pay	8
10 months' service	1	10 years' service	3	13 years' service	1
1 year's service	2	12 weeks' pay	8	14½ years' service	4
5 years' service	1	1 year's service	2	15 years' service	3
3 weeks' pay	20	10 years' service	2	60 weeks' pay	1
10 months' service	1	11 years' service	1	20 years' service	1
1 year's service	2	15 years' service	1	88 weeks' pay	1
2 years' service	8	20 years' service	1	29 years' service	1
3 years' service	2	Service requirement not indicated	1	Maximum not specified	59
5 years' service	7	13 weeks' pay	1		
10 years' service	2	1 year's service	2		
20 years' service	1	10 years' service	2		
4 weeks' pay	2	11 years' service	1		
10 years' service	2	15 years' service	1		
8 weeks' pay	3	15 weeks' pay	2		
5 years' service	1	13 years' service	1		
9 years' service	1	15 years' service	1		
10 years' service	1	24 weeks' pay	1		
		35 years' service	1		

¹ Five other agreements did not state the minimum amount in terms of weeks' pay. Two of these five agreements allowed a minimum of \$500 after 15 years' service, and one allowed \$500 after 5 years' service. The other two agreements allowed a minimum of 2 percent of the employee's annual earnings after 1 year's service.

² Three other agreements did not state the maximum amount in terms of weeks' pay. Two of these three allowed a maximum of 6 percent of the employee's annual earnings after 25 years' service. The remaining agreement allowed a maximum of \$5,000 but was not clear regarding the length of service required to qualify for the maximum.

Computation of Service and Pay

Since most dismissal-pay plans relate the amount of pay to length of service, the computation of an employee's length of service becomes a matter of prime concern. In most instances, the agreements specified that such service must be continuous. Service credits of rehired workers begin with their reemployment, as expressed in the following typical clause:

Any employee who receives lay-off allowance as herein provided, and who is subsequently reinstated in employment with the company within two (2) years from the date of such lay-off, shall not again be eligible for additional lay-off allowance until he accumulates two (2) additional years of unbroken continuous service credits with the company. Upon establishing two (2) years additional continuous service credit after such reinstatement, the employee shall again be entitled to lay-off allowance in accordance with his established unbroken continuous service credit with the company if again laid off under the conditions herein provided.

Few agreements specified the actual monetary amount of dismissal pay to which eligible employees were entitled. Usually it was stated as a designated number of hours' or weeks' pay. Computation of the amount was related, on some agreed-upon basis, to the earnings of the individual worker.

The most common rate (specified by 67 of the 168 agreements) was the regular hourly or weekly rate received by the employee at the time of separation. Another group of 53 agreements provided for payment on the basis of the employee's average hourly or weekly earnings, calculated over a specified period prior to the time of dismissal.

Lump-sum payments, usually at the time of dismissal, were specified in all but 7 of the 168 agreements with dismissal-pay clauses. However, in a few instances a waiting period of 4 to 6 weeks was required. Several provided for payment in weekly or monthly installments.

Seven agreements provided that an employee's earned dismissal pay could be converted to a death benefit payable to the beneficiary or estate of an employee. All but one of these seven agreements were in the printing and publishing industry.

Injury Rates in Construction Occupations, 1948¹

THE MOST HAZARDOUS of the 43 occupations studied in the construction industry was that of pile-driver operators. This occupation had the highest injury-frequency rate—97.3 disabling injuries per million employee-hours worked. Six other occupations also had exceedingly high injury-frequency rates, ranging from 88.4 for welders to 53.9 for structural-iron workers. Only three occupations had frequency rates below 20; of these, floor-sanding-machine operators had the lowest, 6.0.

Industry-wide injury-frequency rates indicate that the construction industry ranks high among the more hazardous industries. However, it is generally recognized that industry-wide averages conceal the wide variations in hazards existing between the many different types of construction work. Detailed analysis showing such variations and highlighting the particular activities in which hazards are greatest is usually impossible owing to the difficulty of assembling a sufficient volume of information to insure adequate representation of each occupational division.

To provide some of this occupational detail, the Bureau of Labor Statistics survey of injuries in the construction industry for the year 1948 was greatly expanded. More than 33,000 separate occupational reports, received from some 16,000 employers, included records of 26,402 disabling injuries experienced in the course of nearly 720 million man-hours of work.

Standard practice in the Bureau's surveys is not to show any injury rates that are based upon less than a million man-hours.² In the construction survey, however, complete coverage in some occupations would not yield a total of a million man-hours within the calendar year. Therefore, to avoid omission of such occupations, it was neces-

¹ By Frank S. McElroy and George R. McCormack of the Bureau's Branch of Industrial Hazards.

² Since injury rates based upon less than a million man-hours are subject to relatively large chance variations, their representativeness as indicators of the prevailing level of hazard is somewhat questionable.

sary to modify the regular procedure and to show rates based upon as few as 400,000 man-hours. On this basis, injury rates were computed for 43 occupational classifications, 6 of which had man-hour coverage of less than a million.

Pile-driver operators, in addition to having the highest injury-frequency rate, were at or near the top in all injury-severity comparisons. The frequency rate for fatalities and permanent-total dis-

abilities was 2.5. This was slightly lower than the corresponding rates for oilers and greasers and for blade-grader operators, but was 6 times as high as the average for the entire construction industry. For permanent-partial disabilities, the frequency rate for pile-driver operators was 9.3, substantially above that for any other operation, and again, 6 times as high as the all-construction average.

Industrial injury rates for 16,321 construction companies, by occupation and extent of disability, 1948

Occupation	Number of establish- ments report- ing	Em- ployee- hours worked (in thous- ands)	Number of disabling injuries reported			Frequency rates of 2—				Severity				
			Total	Number resulting in—			All dis- abling in- juries	Death and per- manent- total dis- ability	Per- manent- partial dis- ability	Tem- porary- total dis- ability	Dis- abling injury	Tem- porary- total dis- ability		
				Death or per- manent- total dis- ability ¹	Per- manent- partial dis- ability	Tem- porary- total dis- ability								
Total⁴	16,321	719,867	26,402	(40)	320	1,063	25,019	36.7	0.4	1.5	34.8	135	14	5.0
Air-tool operators	47	1,388	87	(1)	3	9	75	62.7	2.2	6.5	54.0	418	24	26.2
Asbestos workers	15	6,091	169	1	3	165	33.2	2.2	6	32.4	64	12	2.1	
Boilermakers	58	2,655	86		3	83	32.4		1.1	31.3	56	21	1.8	
Bricklayers	1,691	21,866	611	(1)	7	19	585	27.9	.3	.9	26.7	127	15	3.5
Carpenters	3,639	90,076	3,442	(4)	30	145	3,267	38.2	1.6	3.6	30.3	106	14	4.1
Cement finishers	1,672	10,913	272	(1)	2	9	261	24.9	.2	.8	23.9	105	18	2.6
Electricians	2,161	54,306	1,236	(4)	37	52	1,167	23.1	1.0	2.1	21.4	247	15	5.7
Floor layers, composition	114	1,433	18	1	3	14	12.6	.7	2.1	9.8	903	19	11.3	
Floor-sanding-machine operators	87	503	3			3	6.0			6.0	.5	5		(4)
Foremen and superintendents	322	3,967	114	(1)	2	9	103	28.7	.5	2.3	25.9	188	19	5.4
Glaziers	489	7,100	228			7	221	32.1		1.0	31.1	48	11	1.6
House movers	50	852	27	2	1	24	31.7	2.3	1.2	28.2	469	15	14.9	
Insulation men, not elsewhere classified	102	1,363	49			1	48	36.0		.7	35.3	48	11	1.7
Ironworkers ⁴	855	33,174	1,756	(3)	32	141	1,583	52.9	1.0	4.3	47.6	244	17	12.0
Ornamental	129	3,469	159	1	9	149	45.8	.3	2.6	42.9	102	11	4.7	
Structural	711	29,240	1,576	(3)	31	131	1,414	53.0	1.1	4.5	48.3	261	17	14.1
Laborers, general	4,679	156,113	7,132	(7)	54	181	6,897	45.7	.3	1.2	44.2	89	12	4.1
Lathers	355	4,554	177	(1)	3	2	172	38.9	.7	.4	37.8	125	11	4.9
Maintenance men, general	240	3,053	170	(2)	3	9	158	55.7	1.0	2.9	51.8	180	11	10.0
Millwrights	48	1,045	22			2	20	21.1		1.9	19.2	61	22	1.3
Mosaic and terrazzo workers	130	2,229	58	2	1	55	26.0	.9	.4	24.7	285	9	7.4	
Oilers and greasers	108	1,046	49	(1)	3	6	40	46.8	2.9	5.7	38.2	579	27	27.1
Painters	1,942	28,974	606	14	29	863	20.9	.5	1.0	19.4	231	19	4.8	
Pipe fitters	19	2,422	104	1	1	102	42.9	.4	.4	42.1	86	12	3.7	
Plasterers	881	13,350	518	1	18	499	38.8	.1	1.3	37.4	83	12	3.2	
Plumbers	1,765	27,586	815	7	35	773	29.5	.3	1.3	27.9	126	12	3.7	
Power-equipment operators ⁴	2,713	27,864	1,060	(2)	22	61	977	38.0	.8	2.2	35.0	207	15	7.9
Blade-grader operators	164	750	17	2	1	14	22.7	2.7	1.3	18.7	950	11	21.5	
Buildsizer operators	318	1,515	45	1	3	41	29.7	.7	2.0	27.0	173	12	5.1	
Cranes and winch operators	302	1,776	56	1	4	51	31.5	.6	2.3	28.6	254	18	8.0	
Dredge operators	14	1,405	51	1	2	48	36.3	.7	1.4	34.2	166	8	6.0	
Pile-driver operators	48	1,181	115	(1)	3	11	101	97.3	2.5	9.3	85.5	291	24	26.3
Power-shovel operators	402	2,277	89	5	84	39.1	2.2	36.9		88	15	3.4		
Tractor operators	210	2,685	87	1	2	84	32.4	.4	.7	31.3	130	10	4.2	
Huggers	19	410	17		3	14	41.5		7.3	34.2	260	27	10.8	
Roofers ⁴	898	10,324	535	5	13	517	51.8	.5	1.3	50.0	111	15	5.8	
Composition	661	7,855	425	4	10	411	54.1	.5	1.3	52.3	118	14	6.4	
Slate or tile	153	1,429	70	1	2	67	49.0	.7	1.4	46.9	117	21	5.7	
Sheet-metal workers	913	18,829	623	(1)	5	17	601	33.1	.3	.9	31.9	95	9	3.2
Steam fitters	523	14,450	439	2	17	420	30.4	.1	1.2	29.1	101	13	3.1	
Stonemasons	269	2,222	55		6	49	24.8		2.7	22.1	117	15	2.9	
Tile setters	516	9,229	182	2	12	168	19.7	.2	1.3	18.2	192	14	3.8	
Truck drivers	2,692	23,815	721	11	20	690	30.3	.5	.8	29.0	141	14	4.3	
Welders	86	894	79		2	77	88.4		2.2	86.2	55	10	4.9	
Well-drill operators	145	2,578	102	6	13	83	39.6	2.3	5.0	32.3	557	21	22.0	
Wreckers	36	510	29			29	56.8			56.8	23	23	1.3	

¹ Figures in parentheses indicate the number of cases of permanent-total disability included.

² The frequency rate is the average number of disabling injuries per million hours worked. A disabling injury is one that results in death, permanent-total disability, permanent-partial disability, or in an inability to work for at least one full shift on any day after the day of injury.

³ The severity rate is the average number of days lost per thousand hours worked.

⁴ Totals include figures not shown separately because of insufficient data for detailed classification.

⁵ Less than 0.05.

Temporary disabilities experienced by pile-driver operators tended to be very severe, averaging 24 days of lost time per case as compared with 14 days for the entire industry. The permanent-partial disabilities, however, tended to be less severe than those experienced in many other construction occupations. The injury severity rate for pile-driver operators—28.3 days lost for each 1,000 employee hours worked—was higher than for any other occupation and was over 5 times the industry average. The average time charge per disabling injury in the occupation—291 days—was lower than for 6 other occupations, although it was more than double the average for the industry as a whole.

Floor-sanding-machine operators—workers who do not come on the job until practically all other construction work has been completed—were at the other extreme with a low frequency rate of only 6 disabling injuries per million employee-hours worked. All the injuries reported for this occupation were temporary, and the average time lost per case was only 5 days. The severity rate for this occupation, therefore, was very low—less than 0.05.

In addition to pile-driver operators, 6 other occupations had exceptionally high injury-frequency rates. These were: welders, 88.4; air-tool operators, 62.7; wreckers, 56.8; maintenance workers, 55.7; composition roofers, 54.1; and structural-iron workers, 53.9. The injuries experienced by air-tool operators, maintenance men, and structural-iron workers included relatively high proportions of fatalities and permanent impairments. This resulted in quite high severity rates and average time charges per case for these 3 occupations. No fatalities were reported for welders; no fatalities or permanent impairments were reported for wreckers. The two latter occupations, therefore, ranked very favorably in injury severity.

A majority of the occupations (27) had injury-frequency rates ranging between 20 and 40; 6 had rates in the medium-high range of 40 to 50; only 2, in addition to the floor-sanding-machine operators, had rates below 20.

In addition to a relatively high frequency rate (46.8), oilers and greasers had a high proportion of fatalities and permanent impairments, which placed them near the top in respect to injury severity. Composition floor layers had a very low frequency

rate (12.6), but 1 death and 3 permanent-partial impairments in 18 reported injuries gave them a high severity rating. Other occupations with particularly high frequency rates for permanent-partial impairments were riggers (7.3) and well-drill operators (5.0). High rates for fatalities and permanent-total disabilities included those of house movers (2.3) and blade-grader operators (2.7).

Among the more common occupations—i. e., those with the largest numbers of workers—laborers ranked high in injury frequency (45.7), but both fatality and permanent-impairment rates were below average. As a result, this occupation stood relatively low in the injury-severity comparisons. Injury-frequency rates for plasterers (38.8) and carpenters (38.2) were slightly above the all-construction average, but both occupations ranked better than average in respect to injury severity. Sheet-metal workers, steam fitters, truck drivers, plumbers, bricklayers, and cement finishers, all had frequency rates somewhat lower than the all-construction average, and also ranked better than average in injury severity. Electricians and painters had lower than average frequency rates, but their injuries included a somewhat higher than average proportion of fatalities, which gave them relatively high average time losses.

New Family Expenditure Study in Denmark¹

A 1948 SURVEY OF family expenditures was made by the Danish Statistical Department in May and June 1949 for the purpose of revising the weights in its retail-price index. These weights were last adjusted in 1942. Although realizing the limitations of the 1942 budget, the Department believed that postponement of a new survey was desirable until economic conditions became more stable. However, it yielded to pressure from labor to make the new family-consumption survey. The 1942 budget had been criticized by trade-union circles and by the Communist press because the index failed to show quality deterioration, and

¹ By Anna-Stina Ericson of the Bureau's Division of Foreign Labor Conditions.

the change in consumption habits which had resulted from greater employment and higher wages in the postwar period.

Most Danish wage earners receive cost-of-living supplements based on changes in the retail-price index. At the end of 1949, about a third of average take-home pay consisted of such supplements. For 7 years prior to October 1949, the index was based on a family-expenditure survey made during April-May 1942.

Earlier Danish surveys were based on detailed expenditure accounts kept by selected families; in 1942 these were kept for a 4-week period and expanded to an annual basis, and in 1931 for the period of a year. The 1948 survey differed in several respects from those previously made: it covered a much wider range of income groups and commodities; it included a much larger proportion of salaried workers in private business and in government service; and according to the report of the Danish Statistical Department, it was conducted according to sampling techniques used in the United States.

Use of a standard questionnaire and the interview method in 1948 eliminated the criticism that the "survey family" was too budget-conscious. Furthermore, it provided a means of increasing coverage and of obtaining quicker and more representative results.

Sampling Methods and Coverage

To represent a typical national cross section of wage-earning and salaried groups in private enterprise and in government, 500 families were interviewed. Usable data were obtained from 443 families, of which 207 were located in Copenhagen, 192 in provincial cities, and 44 in smaller towns. Families in strictly rural areas were excluded.

Thirty provincial cities and smaller towns were chosen in addition to Copenhagen in order to obtain a national average for nonfarm wage and salaried workers. The size of the sample in each of the 31 communities surveyed was determined according to the number of families in the area dependent on wages and salaries. This sample was then distributed among hourly workers and salaried employees, in both private industry and government service, in a ratio proportionate to the numerical size of each group in the area.

In computing the average expenditure of the group covered in the country as a whole, the data from the three areas—Copenhagen, the group of provincial cities, and the group of smaller towns—were weighted in the ratio of 40:40:20. Equal weights had been assigned to the figures from the three types of communities in the 1942 survey.

Almost a third of the families covered in the 1948 survey received their incomes from salaries; the rest from wages. (In 1942 the survey for the first time included families of salaried employees of State railways, street cars, postal and telegraph offices in addition to wage earners.)

No families with expenditures below 4,000 kroner in 1948 were selected. Expenditures for the highest group tabulated averaged 24,400 kroner. The Statistical Department inferred that both husband and wife in the higher expenditure groups had full-time employment. (In the 1942 survey, income classes ranged from 2,000 kroner a year to 8,000 kroner and over, but the sample used in constructing the weights for the retail-price index excluded all families with incomes over 6,000 kroner, either because they were not considered representative of working-class groups, or because they had had unusual expenditures during the survey period.) In 1948, expenditure data from all the families in the sample were used as the weights for the revised retail-price index.

Expenditures and Consumption Patterns

The average yearly expenditures in 1948 for all families in the survey were around 10,000 kroner, nearly double that of the sample used in 1942. Almost 80 percent of the families had total expenditures between 7,000 and 15,000 kroner. Average expenses in 1948, by type of community for wage earners and salaried persons, were as follows:

	Average expenses (in kroner)		
	Wage earners	Salaried persons	Total
Copenhagen	10,465	13,334	11,688
Provincial cities	8,256	12,002	9,290
Smaller towns	7,750	9,181	8,238

The great difference between family expenditure as shown by the 1948 and 1942 surveys is explained partly by the general rise in the price and wage level, the deliberate inclusion of a much higher earnings group in the 1948 study, and the

inclusion of families in which the husband had supplemental earnings or income and the wife had money earnings, as they occurred in the sample. Figures on the incomes of the families covered in the 1948 survey are not available. It has been stated, however, that 80 percent of the average family income came from the husband's wages, 9 percent from his supplementary income, and 11 percent from the wife's earnings (9 percent outside home, 2 percent inside home). Table 1 shows family expenditures in the two surveys at 1948 prices and the percentage distribution by category.

TABLE 1. Denmark: *Expenditures of nonfarm families according to the 1948 and 1942 surveys, revalued at 1948 prices*¹

Item	Expenditures (in kroner)		Percent of total expenditures	
	1948	1942	1948	1942
Food ²	2,721	2,043	27.1	38.0
Clothing, shoes, and laundry.....	1,426	835	14.2	10.0
Housing.....	787	587	7.8	10.9
Heat and light.....	521	374	5.2	6.9
Taxes and insurance.....	1,752	860	17.5	15.9
Other expenditures.....	2,835	983	28.2	18.3
Household goods; purchases and replacements.....	497	140	4.9	2.6
Liquor, tobacco, and meals out.....	672	239	6.7	4.4
Hygiene and culture.....	846	340	8.4	6.2
Transportation.....	237	77	2.6	1.5
Miscellaneous.....	563	187	5.6	3.5
Total expenditures for current consumption.....	10,042	5,382	100.0	100.0

¹ 1942 data cover expenditures of wage-earner families with incomes from 2,000 to 6,000 kroner in that year; 1948 data cover expenditures of a representative sample of families of wage and salary workers with expenditures over 4,000 kroner.

² Total expenditures for food are broken down among the principal categories according to per capita consumption statistics.

Sources: *Statistiske Efterretninger*, No. 58, Nov. 1, 1949, Danish Statistical Department; and *Arbejdsmændenes Fagblad*, No. 20, Oct. 31, 1949.

Differences in the expenditure patterns shown by the 1942 and 1948 surveys resulted not only from changes in consumption habits which had occurred during the interval, but also from differences in the occupational status of the groups covered, which is not comparable in the two surveys. In addition, the average size of the survey family was smaller—1.84 children in 1942 and 1.30 children in 1948.

The most striking contrasts between the distribution of expenditures shown by the two studies are in the proportion spent on food, 38 percent in 1942 and 27 percent in 1948, and in the proportion for miscellaneous items, 18 percent in 1942 and 28 percent in 1948. Both of these differences are accounted for by the inclusion of higher income groups and the decline in size of

families. Substitution of margarine (which was not available in 1942) for butter has also contributed to the difference in the percentage allocated to food. Clothing had a larger share of expenditures in 1948 than in 1942, reflecting increased supply and better quality. The smaller proportion spent on housing resulted from continuation of the rent-freeze act and from the inclusion of the higher income levels.²

The Revised Retail Price Index

The new weights obtained from the 1948 survey were applied, beginning October 1949, to the retail-price index. Computations were made on a chain basis, so that the new index is tied to the old. This had also been done in 1942.

Each category in the retail-price index was given a weight equal to the percent spent for that category by the group surveyed in 1948 as shown in table 1. (Individual weights assigned to the items in each category cannot be discussed within the limited scope of this article.) Prices were collected on a considerably larger number of items in 1948 than in 1942.

The new index showed no change in the all-items figure between July and October 1949.

Price increases in that period in food and clothing were offset by reductions in prices for household replacements, and hygienic and cultural items and in the cost of social insurance. Since taxes and housing are priced only once a year (in July and January, respectively), they showed no change in October. The index for January 1950, however, rose 4 points to 183, the most noticeable increases being in food, clothing, and fuel. The 1-point rise in the index for household goods purchases and maintenance was due to new building in 1949, with relatively higher rent levels, and slightly higher-than-average rent for older housing.

Reactions reported on the new survey have thus far been quite favorable. Both trade-unions and the Statistical Department believe that it is much more representative of actual consumption habits than the 1942 study. Employers consider it more "sensible" as well, although they felt that the old retail-price index was on the whole a fair representation of actual conditions and was not unfavorable to the workers.

² Official statistics show that the real wages index in 1948 was 116 as compared with 82 in 1942 (third quarter 1939=100).

TABLE 2.—*Cost of living index for major groups and for all items [1935=100]*

Item	1940		1949		
	Jan.	Oct.	July	Apr.	Jan.
All items.....	183	179	179	181	181
Food.....	193	182	180	180	181
Clothing, shoes, and laundry.....	200	197	195	195	196
Housing.....	138	136	136	136	136
Heat and light.....	264	257	256	241	242
Taxes.....	251	251	251	306	306
Dues and insurance.....	135	135	136	136	134
Household goods: purchases and maintenance.....	196	195	206	205	205
Liquor, tobacco, and meals out.....	225	224	224	224	221
Hygiene and cultural items.....	161	161	162	163	161
Transportation.....	174	174	174	174	165
Miscellaneous.....	154	148	148	148	144

Source: *Statistiske Efterretninger*, No. 60, Nov. 10, 1949, and No. 4, Feb. 2, 1950.

The retail-price index, whether weighted according to the new or the old survey, showed remarkable stability in the postwar period. Maintenance of this stability will depend on the Government's ability to sustain price controls despite devalua-

tion and progressive devaluation, measures which, though inevitable in the country's postwar economic development, are a constant threat to the Government's wage-price stabilization program. Any upward trend in the retail-price index would affect the entire economy because of the fact that wage supplements are adjusted in accordance with changes in this index. The Government's proposed program of cutting import restrictions under the trade-liberalization program among ERP countries is not expected to have an appreciable effect on Danish consumer prices, except that prices of some manufactured goods might be lowered because of the increased competition of imports.

Sources.—Danish Statistical Department: *Forbrugundersøgelsen 1948 og det nye pristalsbudget*, in *Statistiske Efterretninger*, No. 58, November 1, 1949. "Den nye pristalsberegning," in *Tidsskrift for Industri*, No. 20, October 15, 1949, Copenhagen. "Det nye pristals budget," by Henry Grunbaum, in *Arbejdernes*, No. 22, November 15, 1949, Copenhagen. Foreign Service Reports from the American Embassy in Copenhagen, especially Report No. 269, the Danish Cost of Living Index: New Family Consumption Budget, by Edith Wall, November 21, 1949.

Trade-Union Organization in Ireland¹

IRELAND'S LABOR MOVEMENT is influenced by the country's moderate industrialization and by the intensity of its nationalism. Two national trade-union federations exist in Ireland—the Congress of Irish Unions and the Irish Trade Union Congress. The former is composed of strongly nationalistic unions with headquarters in Ireland; the latter is made up largely of Irish branches of British unions. Along with the two national federations are two labor parties dividing labor's political strength.

Development of the Irish labor movement has been linked with that of Great Britain. It had much the same origins and developed along the same lines, although less rapidly. Some of the pioneers and leaders of trade-unions in Great Britain were Irishmen; later, many Irish unions were assisted by British unions in organizing and

carrying on their activities. In addition, until the creation of the Irish Free State in 1922, all of Ireland came under British law.²

National Unions

Most national unions in Ireland cover occupational groups (seamen, teachers, store clerks, etc.) or a number of related occupations, or even industries. The national unions perform functions similar to those of American and British unions—collective bargaining, provision of benefits to members, and political action. The performance of these functions, however, is hampered by the multiplicity of unions, some national, some local; some with headquarters in Ireland, some in England. It is common to find several competing unions operating in the same establishment; in the building industry and in metal and engineering trades, there are at least 20 different unions. National unions—whether Irish- or British-based—must generally refer strike action to their "central

¹ By Ann S. Ritter of the Bureau's Division of Foreign Labor Conditions.

² The Irish constitution provides that laws in force at the date of its coming into operation, if not inconsistent therewith, should continue in force until repealed or amended by enactment of Parliament.

executives." In some cases, Irish representatives are included on the central executives of unions with headquarters in Great Britain.

General unions, prominent in Ireland, are also national in scope. These unions, whose membership comprises nearly all types of labor, are divided into branches and sections according to locality or vocation. For example, the Irish Women Workers' Union organizes women employed in a variety of occupations, and thus competes with other unions which take in women workers.

The oldest general union, the Irish Transport and General Workers' Union, was founded in 1909. For several years, an effort was made to develop it as the one "big union," organizing all classes of workers into separate occupational sections. In 1924, a group broke away from the ITGWW and formed the Workers' Union of Ireland, also a general union with members (including women workers) in almost every branch of industry, commerce, transport, and the personal services. Since 1921, when the Transport and General Workers' Union was formed by the amalgamation of 14 British unions, its Irish branches have been linked together in an Area Council for all Ireland, and are known as the Amalgamated Transport and General Workers' Union. The bulk of its membership is in northern Ireland. Although the Irish branch is in many respects autonomous, it requires permission of the London central executive for strikes, transfer, or expulsion of members.

Trade-Union Federations

The Irish Trade Union Congress (ITUC), the older of the two federations, is composed of unions with membership in all Ireland, about half being in the 6 northern counties. While 14 of these unions have headquarters in Ireland, the majority are branches of British unions. In 1894, the Irish branches held their first independent congress in Dublin and formed the ITUC, although they continued to be represented in the British Trades Union Congress.

The Irish membership constitutes a small proportion of total membership in the British-based unions. Affiliation with an outside union is thus

an element both of strength and of weakness. Since Irish workers frequently migrate to England, and since conditions in the more industrialized country affect conditions in Ireland, there are practical economic advantages in a union which organizes the same type of worker in both countries. A larger membership means higher benefits, better administration, and more adequate support in strikes or lock-outs. But the control does lie with the much larger British membership.

The Congress of Irish Unions (CIU)—with all but 2 percent of its members in the 26 southern counties—was formed in 1945 by a group of 13 unions, headed by the powerful Irish Transport and General Workers' Union. These unions had withdrawn from the ITUC after a prolonged period of tension and negotiation between certain Irish unions and the ITUC. The differences centered upon (1) the national issue, i. e., the CIU principle that Irish unions should be Irish-based and Irish-controlled; (2) regrouping of unions on an industrial basis to which the CIU is committed; and (3) CIU disapproval of participation in the 1945 conference at which the World Federation of Trade Unions was formed.

All but a few unions are affiliated with one of the two national federations. In general, the unaffiliated unions are small local bodies in individual industries located far from the larger centers of industry.

Membership³

In 1949, trade-union membership in all Ireland amounted to less than 360,000—about 260,000 in the 26 counties of southern Ireland. Membership figures of the two federations from 1938 through 1949, indicate that labor-union membership in Ireland has grown at a rate equal to or exceeding that prior to the split in 1945.

³ Membership figures used throughout are those reported by the federations on the basis of per capita dues and do not necessarily represent total membership. For example, the Amalgamated Transport and General Workers' Union pays per capita dues to the ITUC on 46,000 members, but it is reported to have a membership of 80,000-90,000. Similarly, the Irish Transport and General Workers' Union reports 108,000 for purposes of per capita dues paid to the CIU, while its total membership is reported to be around 120,000. A large portion of this extra number is called "floating membership." In all the general unions, many workers join for a short time and drop out when they move to jobs elsewhere, or join a craft union.

	<i>Irish Trade Union Congress</i>	<i>Congress of Irish Unions</i>	<i>Both</i>	
1938.....	160, 500	-----	-----	
1939.....	161, 800	-----	-----	
1940.....	161, 700	-----	-----	
1941.....	172, 500	-----	-----	
1942.....	169, 800	-----	-----	
1943.....	182, 800	-----	-----	
1944.....	189, 000	-----	-----	
1945.....	145, 000	77, 500	222, 500	
1946.....	147, 100	90, 000	237, 100	
1947.....	151, 000	104, 315	255, 315	
1948.....	181, 100	132, 000	313, 100	
1949.....	195, 900	159, 609	355, 509	

Source: Affiliation membership figures supplied by the federation secretaries.

Although agriculture is an important pursuit in Ireland, most of the farms are small and operated by the owners and their families. As a result, few agricultural workers are organized. A small membership is claimed by the Workers' Union of Ireland, the Amalgamated Transport and General Workers' Union, and a Federation of Rural Workers.

The following figures show 1949 membership of the two federations, based on per capita dues paid.

Irish Trade-Union Congress

	<i>Membership</i>
Amalgamated Transport and General Workers' Union.....	40, 000
Amalgamated Engineering Union.....	20, 814
Workers' Union of Ireland ¹	15, 000
Amalgamated Society of Woodworkers.....	13, 200
National Union of Tailors and Garment Workers.....	9, 333
National Union of Railwaymen.....	9, 318
Irish National Teachers' Organization ¹	7, 333
Irish Women Workers' Union ¹	6, 000
Post Office Workers' Union ¹	6, 000
Union of Shop, Distributive and Allied Workers.....	5, 000
Electrical Trades Union.....	4, 963
Railway Clerks' Association.....	4, 129
Irish Bakers', Confectioners' and Allied Workers' Amalgamated Union ¹	4, 000
National Union of General and Municipal Workers.....	4, 000
All others (with membership of less than 4,000).....	46, 810
Total.....	195, 900

Congress of Irish Unions

Irish Transport and General Workers' Union.....	108, 000
Irish Union of Distributive Workers and Clerks.....	13, 962

	<i>Membership</i>
Irish National Union of Vintners, Grocers and Allied Trades' Assistants.....	3, 975
Irish Engineering and Foundry Union.....	2, 960
Irish Seamen and Port Workers' Union.....	2, 950
Irish Railwaymen's Union.....	2, 000
Irish Engineering, Industrial and Electrical Trade Union.....	1, 987
Electrical Trades Union (Ireland).....	1, 950
Building Workers' Trade Union.....	1, 950
Irish Automobile Drivers and Automobile Mechanics Union.....	1, 699
Operative Plasterers' Trade Society.....	1, 300
Dublin Typographical Provident Society.....	1, 260
All others (with membership of less than 1,000).....	15, 616
Total.....	159, 609

¹ Headquarters in Ireland.

Source: Figures supplied by the federation secretaries.

Domestic and International Programs

In the domestic field the programs and activities of the two federations are similar. Their basic objectives are to improve standards of wages, hours, and other conditions of work, assist in organizing workers into trade-unions, and promote fraternal relations between workers of Ireland and other countries. Toward this end, both Congresses urged legislation during 1948-49 which included provision of higher standards for workers' health and safety, provision for social security benefits, and extended application of the Employees' Holidays Act.

Representation of Irish labor on international bodies and conferences remains a controversial issue between the two federations. The CIU claims the sole right to represent Irish workers at all international meetings because its member unions are purely Irish, and because ITUC members are already represented by the British TUC. The CIU has refused to accept joint representation with the ITUC.

From 1945 through 1947, the Fianna Fail Government appointed nominees of the CIU as the Irish workers' delegate and adviser to International Labor Conferences over strong protests of the ITUC. In 1948, however, the newly elected Irish Coalition Government, unwilling to become involved in the dispute, failed to participate in the San Francisco meeting of the ILO, alleging the need to restrict dollar expenditures. In 1949, the workers' delegate and adviser were again selected from the CIU. At

that time, CIU membership in the Republic of Ireland exceeded that of the ITUC.

The ITUC was affiliated with the World Federation of Trade Unions from 1945 to 1948, but in July 1949 resolved to disaffiliate. It was represented by observers at the London meeting which resulted in the formation of the International Confederation of Free Trade Unions (ICFTU) in November 1949.

The CIU delegates at the 1949 International Labor Conference were not invited to participate in the Geneva preparatory conference for the new international in June. During the summer, the CIU voted to affiliate with the International Federation of Christian Trade Unions (CISC). However, the CIU still maintained that it alone should represent Irish workers in the ICFTU.⁴

The ITUC has represented Irish trade-union organizations at conferences of the European Recovery Program because the CIU refused to sit with the rival federation. Both federations have publicly stated their support of Ireland's participation in the Marshall Plan. In general, criticism of ERP has been expressed, however, in terms of fear that unemployment might result from imports of goods already being produced in Ireland (e. g., certain types of agricultural implements and fertilizers).

Relations with Political Parties

The two trade-union federations are nominating bodies for the labor panel of the Irish Senate. Of the Senate's 60 members, 43 are chosen from 5 panels of candidates established on a vocational basis.⁵ The national executives of the two union federations may each propose 6 names for the labor panel. Unorganized labor, as such, is not represented in the Senate, unless representatives are appointed by the Prime Minister.

The Irish Labor Party (affiliated with the ITUC) and the National Labor Party (backed by CIU in the last election) have similar social programs. Both urge extension of social services by state and public authorities, favor public ownership of essential industries and services, and oppose the partition of Ireland on political and economic grounds. The chief difference between

the two labor parties is their emphasis on nationalism and on separation of the Irish trade-unions from British entanglements.

Prior to 1930, the Irish Labor Party and the ITUC operated as a joint body. In March of that year, the party became autonomous, taking over the political functions of the previous body. Trade-unions, cooperative societies, and other organizations are admitted as corporate members; but a trade-union not affiliated with the ITUC must be approved by it as well as by the party's administrative council before being admitted to membership.

The CIU made no provision in its constitution for political affiliation, but 2 years after its organization, the annual congress instructed its incoming central council to explore the possibility of forming a political arm. The February 1948 election, however, took place before the council had reported, and the CIU supported National Labor Party candidates.

Following the 1948 election, the two labor parties held the balance of power. The Irish Labor Party, political arm of the ITUC, joined in the formation of a Coalition Government, and secured two posts: Deputy Prime Minister and Minister for Social Welfare; and Minister of Local Government. The CIU Central Committee recommended that the five National Labor Party deputies support the Fianna Fail Party for the Prime Ministership because Fianna Fail had previously supported their principle of Irish unions for Irish labor. The deputies, however, wishing to secure a ministerial post for their own party, decided to join the coalition without Fianna Fail. They defended their position on the ground that their supporters had instructed them not to vote for Fianna Fail under any circumstances because of that party's treatment of "rural workers, road workers, old-age pensioners, and other lower-paid sections of the community." Inasmuch as their votes were pivotal in determining which government came into power, the leader of the National Labor Party became Minister for Posts and Telegraphs.

At the CIU's 1949 annual meeting, delegates expressed strong support for the political development of Irish nationalism. But they showed distrust of the attitude of certain political figures toward labor because of what they considered the failure in 1948 to develop an effective political

⁴ ICFTU, however, accepts Christian unions only if they agree to disaffiliate from the CISC within 2 years.

⁵ Representing cultural interests, agriculture and allied interests, labor, industry and commerce, and public administration.

arm in the National Labor Party. The CIU is reportedly interested in developing a political action program similar to that of the American CIO and of the AFL, but no public discussion of this point occurred at the meeting.

Unification Efforts

Since 1945, several approaches to unification have failed because of inability to find a common basis for negotiation. The CIU has insisted on excluding from any merger unions which are branches of British unions, and the ITUC has been unwilling to consider severing its British ties. However, the two labor parties have cooperated successfully in the Coalition Government. They are hopeful of building greater strength before another general election by healing the breach between the trade-union federations. Specific proposals, made by leaders of both labor parties, are said to include a recommendation that trade-unions operating in Ireland should be Irish-based, and that a central trade-union organization for the 32 counties should be Irish-controlled.

SOURCES.—Reports from U. S. Legation, Dublin, prepared by Robert W. Caldwell; Reports of National Executive and Proceedings of ITUC and CIU; Eire Commission on Vocational Organization, Dublin, 1943; Labour and Nationalism in Ireland, by J. D. Clarkson, Columbia University, 1925; Trade Union Organization in Ireland, by R. J. P. Mortished, 1926.

Professional Income: Lawyers and Dentists, 1929-48

CONTRASTING THE INCOME PATTERNS of members of the legal and dental professions, marked differences appear in earnings levels, the growth of income, and the range of earnings. Generally, members of the legal profession receive a higher income than do dentists, yet from 1929 through 1948 nonsalaried dental incomes rose 65 percent as compared with the 47-percent increase in lawyers' incomes. The variation in income is greater for lawyers than for any other profession—somewhat greater than that for physicians and considerably greater than that for dentists. Source of income, size of community, and type of practice bear on the income pattern in each profession.

The average net income¹ of all lawyers in the United States reached \$8,315 and the median net income² \$6,336 during 1948. Dentists averaged somewhat lower in 1948, their average net income being \$6,912 and their median net income \$5,888. These figures are based on recent surveys conducted by the National Income Division of the Office of Business Economics, Department of Commerce, in conjunction with professional associations.

Lawyers³

The survey of lawyers' incomes was conducted by the Office of Business Economics, Department of Commerce, with the cooperation of the Survey of the Legal Profession, an independent organization sponsored jointly by the Carnegie Corporation and the American Bar Association.

Average Net Income, 1929-48. Compared with physicians and dentists, the other two large independent professional groups, lawyers occupy an intermediate position as to average income—below physicians but above dentists.

By 1948, average net income of nonsalaried lawyers reached \$8,121—47 percent above 1929 (\$5,534), and 69 percent above 1941 (\$4,794). Nonsalaried lawyers (constituting about two-thirds of all lawyers) are those who render legal services on a contract or fee basis, either with or without partners, and receive no additional salaried income from law practice.

During the 20-year period for which figures are available, the average net income of nonsalaried lawyers fluctuated with general business conditions (see chart 1). A marked decline in the rate of increase occurred from 1945 to 1946. This is attributed mainly to the release of thousands of lawyers from the armed services in 1946, most of whom began or resumed their legal practices.

Generally, lawyers' income is more unequally distributed than that of other professional groups, yet lawyers' incomes are probably less unequal than those of independent business men. However, lawyers' incomes are tending to become

¹ The (arithmetic) mean income is equal to the sum of all the incomes divided by the number of income recipients, i. e., the average.

² The median income is that income below which (and above which) half of all the income recipients fall.

³ Information from Income of Lawyers, 1929-48, by William Weinfeld, in Survey of Current Business, August 1949.

equalized. This is illustrated by a net decline of about 33 percent in the inequality of incomes which occurred from 1936 through 1947.

TABLE 1.—*Average net income of lawyers, by major source of legal income, by regions, 1947*

Region	All lawyers		Major independent		Major salaried	
	Percent in each region	Mean net income	Median net income	Mean net income	Median net income	Mean net income
United States	100.0	\$7,532	\$5,608	\$7,517	\$5,303	\$7,560
New England	6.5	6,981	5,240	7,064	5,150	6,830
Middle East	30.0	8,779	6,566	8,948	6,246	8,546
Southeast	13.5	6,566	5,201	6,617	4,647	6,375
Southwest	7.2	6,177	4,660	6,137	3,976	6,254
Central	28.7	7,040	5,391	6,854	5,033	7,380
Northwest	4.8	5,933	4,790	6,032	4,656	5,638
Far West	9.3	8,679	6,608	9,259	7,039	7,549

Source: U. S. Department of Commerce, Office of Business Economics.

Source of Income. An attorney may practice law under a number of arrangements. He may conduct his office alone or as a member of a partnership, may be employed on a salaried basis by a law firm, or may be employed as a salaried lawyer for an industrial corporation, labor union, governmental organization, or other employer.

The number of active lawyers in independent practice was augmented by the release of 20,000 lawyers from the armed services in 1945 and 1946 and the unusually large influx of recent law-school graduates. This influx recouped wartime losses. The number of active lawyers increased steadily from 1945 through 1948 reaching a record peak of about 140,000 in the latter year.

The total 1948 gross income of legal firms reached an estimated 1.825 billion dollars. This figure is 97 percent above the corresponding figure for 1941, and 120 percent above that of 1929. The total net income climbed to 1.174 billion dollars by 1948, topping prewar levels by almost as large margins.

Nonsalaried and part-salaried lawyers together received 47.9 percent of their total gross income (exclusive of part-salaried lawyers' salaries) for services to business, during 1947. The remaining 52.1 percent of their total gross was remuneration for legal services rendered to individuals. In 1941, about 48.5 percent of total gross came from services to individuals.

Little more than half of the lawyers' gross receipts were from individuals. In contrast, 7 out of every 10 nonsalaried lawyers depended on indi-

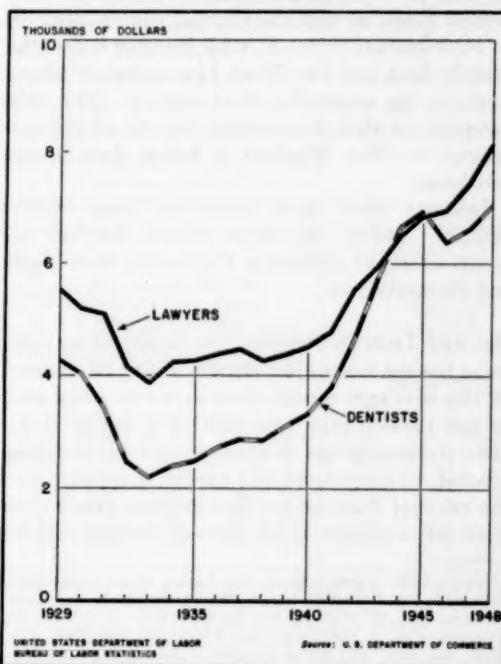
viduals, rather than businesses, for the major portion of their gross receipts. This is explained by the fact that lawyers who concentrate on personal services earn considerably less than those who receive most of their income from services to business.

Both the average and median net income of lawyers increased as the proportion of receipts from personal services declined. To illustrate: in 1947, the average net income of lawyers whose entire receipts were derived from personal services was \$3,264, while lawyers deriving less than 10 percent of their receipts from individuals show a mean of \$14,316.

Size of Firm. Three-fourths of all nonsalaried lawyers practiced in 1947 without partners. Only 15 percent practiced in firms of two partners, 5 percent in firms of three, and 2 percent in firms of four. The mean size of law firms that year was 1.64 members.

Generally, the larger the firm the larger the income of the individual lawyers who compose

Average Net Income of Nonsalaried Lawyers and Dentists



it. In 1947, average net income of lawyers who practiced alone was \$5,759, whereas each lawyer in 2-member firms averaged \$8,030—39 percent more. Individual lawyers in 3-member firms averaged \$12,821, and those in firms of 9 or more lawyers had an average net income of \$27,246.

Average income also tends to increase as the size of the community increases. But in years of substantial unemployment the largest cities have tended to fall behind those of intermediate size. Salaried lawyers' incomes were influenced by community-size differences to a lesser extent.

A third of all practicing attorneys in 1947 were concentrated in cities of 500,000 or more population. Salaried lawyers were relatively more concentrated in cities of this size than were independent lawyers.

Regions and States. Major income differentials exist among the several sections⁴ of the country. Uniformly and markedly higher incomes are received by lawyers in the Middle East and the Far West than by those practicing in other regions. This is true whether all lawyers, independent lawyers, or salaried lawyers are considered, and whether the mean or median is used.

New England and the Central States stand in an intermediate position, with incomes below the Middle East and Far West, but uniformly above those in the remaining three regions. The only exception is that the median income of salaried lawyers in New England is below that in the Southeast.

Incomes vary from State to State within regions. Among the larger States, lawyers' incomes averaged highest in California, New York, and Pennsylvania.

Age and Years in Practice. In nearly all occupations, the age income pattern is basically the same—at the low ages income is at its lowest point and, as age rises income also rises to a peak; thereafter increasing age is accompanied by declining income. This pattern also applies to lawyers; but the unusual features are that lawyers attain their peak earnings later in life than do persons in most

⁴ States included in each region are: New England—Conn., Maine, Mass., N. H., R. I., Vt.; Middle East—Del., D. C., Md., N. J., N. Y., Pa., W. Va.; Southeast—Ala., Ark., Fla., Ga., Ky., La., Miss., N. C., S. C., Tenn., Va.; Southwest—Ariz., N. Mex., Okla., Tex.; Central—Ill., Ind., Iowa, Mich., Minn., Mo., Ohio, Wis.; Northwest—Colo., Idaho, Kans., Mont., Nebr., N. Dak., S. Dak., Utah, Wyo.; Far West—Calif., Nev., Oreg., Wash.

other occupations and that the productive period of a lawyer's life is unusually long.

In 1947, the highest mean net income (\$9,872) of independent lawyers was reached between 50 and 54 years of age. The highest median (\$6,962) was also reached between these ages. Salaried lawyers, however, reached their peak income (mean \$10,606; median \$8,000) between the ages of 60 and 64, or about 10 years later.

In general, the years-in-practice income pattern closely follows the age income pattern. The relationship of age and number of years in practice is somewhat blurred, however, as a result of the extensive war service of lawyers in nonlegal work.

Dentists⁵

The average net income of all civilian dentists in the United States was 60 percent higher in 1948 than in 1929, and 80 percent above 1941. The 1948 mean net income was \$6,912, the median net income \$5,888, in 1929, the mean net income was \$4,275, the median \$3,676. These data were derived from a survey initiated in the spring of 1949 by the Office of Business Economics, Department of Commerce, with the cooperation of the American Dental Association.

Source of Income. Dentists—the third largest independent professional group in the country—are outnumbered only by lawyers and physicians. Approximately 78,000 dentists practiced in an active civilian capacity in the United States in 1948, of whom 92 percent were primarily independent and 8 percent were salaried.

Data from the Bureau of the Census indicate that the number of independent and salaried dentists practicing in the United States remained practically unchanged during the decade from 1930 to 1940. The number in active practice dropped sharply, with the onset of the war and the withdrawal of some 22,000 active dentists from civilian to military practice.

The number of dentists engaged in independent and salaried practices at the end of 1948 was estimated at 78,000; in addition, 1,600 were actively practicing dentistry in the armed forces. Thus, nearly 80,000 dentists were engaged in active civilian or military practice.

⁵ Income of Dentists, 1929-48, by William Weinfeld in Survey of Current Business, January 1950.

Independent dentists had a mean net income of \$7,047 and salaried dentists, \$5,358, but the independent practitioners showed a less striking advantage in terms of the median (\$5,944 and \$5,295, respectively). The differences in average net income between the two types of dentists persists even when the comparison is made between dentists in the same age groups or in communities of comparable size.

Of the salaried dentists practicing in 1948, slightly over a third (37.4 percent) were employed by other dentists. This salaried group reported a somewhat higher income (mean \$5,968, median \$5,432) than the almost two-thirds (62.6 percent) employed by industry or Federal, State, or local governments (mean \$4,993, median \$5,241).

An overwhelming proportion (86.4 percent) of independent dentists practiced alone—with or without employees. Only 3 percent practiced in partnerships, and the remaining 10.6 percent shared office space or employees, but were not members of partnerships.

Of the three types of independent practice (i. e., alone, as a partner, and sharing expenses and employees), the partnership arrangement provided the greatest income. Dentists practicing alone reported the lowest incomes.

Trends in Income. The average net income of nonsalaried dentists (who have constituted between 89 and 94 percent of all dentists), like that of other independent professional practitioners,

has followed the trend in general economic conditions quite closely since 1929. The pre-depression income peak for dentists was in 1929 and the depression low occurred in 1933.

Dentists' incomes fell somewhat more during the depression than did physicians' and considerably more than lawyers'. According to the Department of Commerce, this was due, perhaps, to the greater relative postponability of dental services in the mind of the public (or because of postponement in payment for these services).

After 1933, dental incomes started a long climb—at first rising slowly until 1940 (interrupted only by the 1938 recession), and then more sharply during the war years as personal income increased and civilian dentists declined in number.

In 1945, although the mean net income continued to advance, the rate of increase dropped markedly. For the first time since 1938, a setback occurred in 1946, and dentists' average income declined about 8 percent compared with 1945. This drop was presumably due to the relatively low incomes earned by dentists re-entering civilian practice after release from the armed services. The upward trend was resumed in 1947 and 1948, the highest nonsalaried mean and median net incomes of the 1929-48 period having been recorded in 1948.

Net-to-gross income ratio declined slightly during the years 1944-48, as pay-roll expenses and other costs of practice incurred by nonsalaried dentists increased.

TABLE 2.—Number of dentists and their average net income by major source of dental income and by region, 1948

Region	Average income of dentists in civilian practice with major source of dental income from—						Per capita income of general population, ¹ average	All dentists in civilian practice, number	Civilian population, number (thousands)	Dentists per 100,000 civilian population, number	Percentage distribution of—						
	Independent practice		Salaried practice		Civilian population	All dentists					Dentists with major source of dental income from—						
	Mean net income	Median net income	Mean net income	Median net income							Independent practice	Salaried practice					
United States ²	\$6,912	\$5,888	\$7,047	\$5,944	\$5,358	\$5,295	\$1,410	78,380	146,521	53	100.00	100.00	100.0	100.0			
New England	5,891	4,896	6,100	5,125	(9)	(9)	1,501	6,016	9,192	63	6.27	7.67	7.5	9.8			
Middle East	6,075	5,122	6,174	5,166	4,778	4,827	1,647	24,217	34,803	70	23.75	30.90	31.2	27.4			
Southeast	7,117	6,172	7,348	6,321	(9)	(9)	957	8,275	29,941	28	20.43	10.69	10.6	11.3			
Southwest	8,439	7,393	8,587	8,063	(9)	(9)	1,153	3,585	10,923	33	7.45	4.57	4.7	3.3			
Central	6,673	5,826	6,763	5,858	5,464	5,442	1,534	23,277	39,307	59	26.83	29.70	30.0	25.9			
Northwest	6,834	6,204	6,792	6,091	(9)	(9)	1,413	4,072	7,649	53	5.22	5.20	5.3	4.0			
Far West	9,751	8,920	10,210	9,137	6,667	6,150	1,579	8,838	14,706	60	10.04	11.28	10.7	15.3			

¹ The per capita figures are from State Income Payments in 1948, by Charles F. Schwartz and Robert E. Graham, Jr., Survey of Current Business, August 1949, table 8, p. 15.

² Estimated number of independent and salaried dentists in active civilian practice as of Dec. 31, 1948. (Excludes dentists in the armed forces, who numbered approximately 1,634 at the end of 1948.)

³ Estimated civilian population as of Dec. 31, 1948. Calculated from Census Bureau estimates for July 1, 1948, and July 1, 1949, by straight-line interpolation. See Census releases P-25, Nos. 26 and 32.

⁴ Detail will not necessarily add to total because of rounding.

⁵ Too few cases in sample to yield reliable results.

Source: U. S. Department of Commerce, Office of Business Economics.

Prior to World War II, payments to independent dentists for dental services by other than consumers themselves were negligible. By 1948, however, about 5.3 percent of all gross income received by dentists from independent practice came from government agencies, business firms, and other organizations. The overwhelming proportion of these payments came from the Veterans Administration which disbursed approximately 50 million dollars to dentists in 1948.

Specialization among dentists is the exception rather than the rule. In 1948, for example, 88.5 percent of all dentists were engaged in general practice. No clear-cut trend toward specialization has been evident. It is clear that dental specialists' earnings average higher than those of general practitioners; the gap between the earnings of the two types of practitioners is being narrowed, however.

The scanty data available on the inequality of dentists' incomes suggest that—except for the war years when income distribution was exceptionally unequal—it has varied little in 20 years. Among the major professions, independent dentists showed the smallest relative variability, or inequality, of income—somewhat smaller than physicians, and considerably smaller than lawyers.

Regional and State Differentials. Not only do significant income differentials exist among dentists geographically, but the relative positions held by practitioners in some areas have changed markedly since 1941. Moreover, the regional ranking of average dental income is significantly different from that for the average income of the general population.

Dentists in the Far West had a higher average net income in 1948 than those in any other section of the country—66 percent larger than that of New England dentists. Their median net income was even more in excess—82 percent—of the New England median. The relative order of the regions in 1941 and 1948 is given below:

	Ranking	
	1941	1948
Far West	1	1
Southwest	5	2
Southeast	4	¹ 3 or 4
Northwest	7	¹ 4 or 3
Central	6	5
Middle East	3	6
New England	2	7

¹ Depending on whether the mean or median is used.

Among 23 larger States for which the sample was adequate, dentists in the States of Washington, California, Oregon, and Texas reported substantially higher mean net incomes than those in any other State.

Relative gains made by dentists since 1941 in the South and Northwest, the Department of Commerce stated, are in line with the broad shifts which have taken place in the regional income structure of the general population. An explanation of the relative low ranking of the Middle East and New England areas lies in the high ratio of dentists to population.

A comparison of per capita expenditures for dental services with the ratio of dentists to population leads to the conclusion that the geographic distribution of dentists is over-concentrated with reference to the economic demand for dental services.

Size of Community. Dentists' earnings are unmistakably influenced by population size of the community. The pattern of variation, however, has been a changing one, particularly for cities of 500,000 or more population. Generally, size of income increased proportionately with size of city until a maximum of about \$8,000 was reached in cities of from 25 to 250 thousand inhabitants. Then, as city size further increased, average income declined until in cities of a million or more the mean net income of all dentists dropped to \$5,980. Only in communities of 2,500 or less did dentists have a lower mean net income than in cities above a million.

Age. Of all the factors associated with income, age seems to show the most consistent relationship. The mean net income of all dentists in 1948 rose sharply and steadily from its lowest (\$2,823) for dentists under 25 years of age to a peak (\$9,117) for dentists 40-44 years of age. Income declined somewhat less sharply with increasing age to \$3,227 for dentists aged 65 and over.

The age at which dentists reach peak earnings has increased during the past 10 years. In 1937, the peak period was 35-39 years; in 1941 there was little difference in the 35-39 and 40-44 age brackets. After 1937, the proportion of older practicing dentists increased, particularly that of dentists over 65—proportionately, this age group has doubled.

Rent Decontrol in Large Cities¹

RENT CONTROL in the larger metropolitan centers of the country remained virtually intact as of February 17, 1950. On that date the decontrol summary of the Office of the Housing Expediter showed that 35 cities with over 50,000 population in 1940 had been removed from Federal control. These cities represent about 10 percent of the total population in that size group. A previous article (in March 1950 issue of the *Monthly Labor Review*, p. 253) describes the effect of rent decontrol in seven of these large cities and the extent of decontrol in general.

More than half of the 35 large cities decontrolled had a population of less than 100,000 in 1940. Rent ceilings have not been lifted in any of the 14 largest metropolitan centers with over 500,000 population. Dwelling units in Milwaukee, the only city removed from Federal control in this group, were immediately placed under the jurisdiction of the Wisconsin rent control law, as were those in Racine and Madison. This law permitted landlords to increase rents from 15 to 30 percent. The largest city left without any sort of rent control is Houston, which had a population of 384,514 in 1940. No large city in the New England, Middle Atlantic, and Central States has taken any action to lift Federal rent ceilings.

Extent of rent decontrol as of Feb. 17, 1950, by population and number of cities

Population group	Cities decontrolled		Total cities within group according to 1940 census listing ²	
	Number	1940 population	Number	1940 population
All groups	35	4,670,865	199	45,331,906
50,000-100,000	3	1,209,788	107	7,343,917
100,000-250,000	12	1,850,563	55	7,792,650
250,000-500,000	3	933,103	23	7,827,514
500,000 and over	1	587,472	14	22,367,825

¹ Total urban population in 1940 was 74,423,702; total urban areas, 3,464.

² Madison and Racine, Wis., with a population of 67,477 and 67,196, respectively, were placed under State rent control on Aug. 5, 1949, when entire State was removed from Federal control.

³ Milwaukee, Wis., was placed under State rent control after removal from Federal control.

⁴ Information is from Defense-Rental Areas or Portions of Areas Decontrolled as of Jan. 15, 1950, and subsequent weekly bulletins of the Office of the Housing Expediter; the Statistical Abstract of the United States, 1949; and the *New York Times*, Jan. 1 and Feb. 21, 1950.

The recent actions of the Alabama and Virginia Legislatures to decontrol those States entirely on May 10 and June 10, respectively, would affect seven more large cities. However, these actions would increase the total population of decontrolled cities to only 12 percent of the total in all cities in the 50,000 and over group.

The local and State option provisions of the Housing and Rent Act of 1949, which authorized responsible local councils and State legislatures to lift Federal rent ceilings in their areas, accounted for almost all of the decontrol actions in these cities. Rent controls in St. Petersburg, Fla., and Spokane, Wash., were removed by the Housing Expediter upon his own initiative and in Phoenix, Ariz., and Little Rock, Ark., upon the recommendation of the Local Rent Advisory Boards.

The extent of this city decontrol varies considerably by State—Texas alone accounting for almost a third of the total. Amarillo, Austin, and Waco were decontrolled by local option prior to October 19, 1949, when Federal rent ceilings were lifted in the entire State by the Texas Legislature. The large cities affected by this action were Beaumont, Dallas, El Paso, Fort Worth, Galveston, Houston, San Antonio, and Corpus Christi.

In Florida—Tampa, Miami, and Jacksonville—rents were decontrolled individually by the legislature after the Governor had vetoed a measure to lift rent ceilings throughout the State. St. Petersburg was decontrolled earlier by the Housing Expediter. Other cities in the South and Southwest that have been removed from Federal control are Chattanooga and Knoxville, Tenn.; Phoenix, Ariz.; Columbus, Ga.; Asheville, N. C.; Oklahoma City, Okla.; Columbia, S. C.; and Little Rock, Ark.

In the Midwest, Wisconsin substituted a State rent control law on August 5, 1949. This action affected only 3 cities with over 50,000 population, as already mentioned. Nebraska lifted Federal rent ceilings in the entire State over the veto of the Governor. The large cities decontrolled were Omaha and Lincoln. Topeka and Wichita, Kans., and Salt Lake City, Utah, were decontrolled by local option.

Four cities in the Far West—Spokane, Wash., and Pasadena, Glendale, and Long Beach in Los Angeles County, Calif.—have been removed from Federal control.

Annual Report of the NLRB, Fiscal Year 1949¹

THE NATIONAL LABOR RELATIONS BOARD recorded the busiest year in its history during the year ending June 30, 1949—its first full fiscal year of administering the Labor Management Relations (Taft-Hartley) Act. A record number of cases were closed, the backlog of cases awaiting action was greatly reduced, and a mounting number of unfair labor practice complaints were issued.

A total of 32,796 cases of all types were closed during 1948-49. These included 4,664 unfair practice, 9,245 representation, and 18,887 union-shop authorization cases.

In 1946-47, the NLRB's last and busiest year under the National Labor Relations (Wagner) Act, it closed 14,456 cases of all types. The Taft-Hartley Act went into effect early in the fiscal year 1948; during that year, the NLRB closed 29,151 cases—27,087 of which were processed under the new law.

During the fiscal year 1949, the NLRB reduced its backlog of cases awaiting action by more than half. On July 1, 1949, only 5,722 cases of all types were pending with the agency—in the field offices, before trial examiners, and with the 5-member Board itself. This was a reduction of about 55 percent from the 12,644 cases on the docket at all levels on July 1, 1948.

Formal decisions were issued by the Board in its first full year of operation with 5 members—instead of the 3 provided by the Wagner Act—in a total of 3,365 cases. These included 484 unfair labor practice, 2,498 representation, and 383 union-shop cases. This was an increase of 64 percent over the 2,054 cases of all types decided by the Board in 1947-48.

The Office of the General Counsel, set up by the Taft-Hartley Act for the investigation and prosecution of unfair-labor-practice charges, issued formal complaints in 617 such cases during 1948-49. Complaints in 475 cases charged the employers with unfair practices; in 142 cases, the unions were charged with unfair practices. This was more than double the total of 305 complaints which were issued during the fiscal year 1948.

¹ National Labor Relations Board: Fourteenth Annual Report, for the Fiscal Year Ended June 30, 1949, Washington, 1950; and Press release (R-291), February 19, 1950.

Injunctions

The General Counsel in 1948-49 petitioned U. S. district courts for 32 injunctions of varying types—all against labor organizations. Twenty-one injunctions were sought under the law during the previous fiscal year. Of those sought in 1948-49, 2 were asked for under discretionary provisions of the act, and 30 were sought under the mandatory provisions. The latter require the General Counsel to seek an injunction whenever he has "reasonable cause to believe" that charges of secondary boycott or certain other specified unfair labor practices of unions are true. The act confers discretionary power to seek injunctions in cases of jurisdictional dispute or any other type of unfair labor practice by either an employer or a union.

All mandatory injunctions sought, except one, were requested in order to halt alleged secondary boycotts. The exception was a case in which a union was charged with trying to induce employees to strike after another union had been certified by the NLRB as the bargaining agent.

The courts granted 16 of the injunctions requested and denied 4. Four others were withdrawn or dismissed after settlement or after cessation of the alleged illegal conduct. The remaining 6 petitions for injunctions were pending in the courts at the close of the fiscal year.

Elections—Union-Shop and Representation

NLRB field men conducted 20,720 elections of all types, in which 2,341,456 employees were eligible to vote, during the fiscal year 1949.

Union shops were authorized in 15,074 elections, in which 1,733,922 employees were eligible to vote. These polls determined whether the employees wanted their union to negotiate a contract requiring membership in the union as a condition of continued employment. Negotiation of a union-shop contract was authorized in 14,581 or 96.7 percent of the elections. Union participation in the polls was as follows:

	AFL unions	CIO unions	Independent unions
Number of elections held	10,830	2,024	2,220
Number won	10,448	1,979	2,154
Percent of total	96.5	97.8	97

Representation for collective-bargaining purposes was determined in the remaining 5,646 elec-

tions, in which 607,534 employees were eligible to vote. In 3,939 (about 71 percent) of these elections, bargaining representatives were chosen, but in 1,625, the employees rejected bargaining representation. Union participation in elections was as follows:

	<i>AFL unions</i>	<i>CIO unions</i>	<i>Independent unions</i>
Number of elections held..	3,399	1,546	1,311
Number won.....	2,092	858	939
Percent of total....	62	55	72
Number of votes polled..	133,323	162,592	91,261

Petitions to decertify a currently recognized or certified union caused 132 of the representation elections, in 50 of which the employees voted to retain the union. AFL unions won 22 of the 54 such elections in which they participated; CIO unions, 25 out of 62; and unaffiliated unions, 3 out of 17. Petitions filed by employers resulted in 157 of the representation elections; in 100 of these polls (about 64 percent), employees voted in favor of bargaining representation.

Unfair Labor Practices

The NLRB's Division of Trial Examiners held hearings in 414 unfair-labor-practice cases during 1948-49. This was more than double the number of such hearings conducted during the previous fiscal year. The trial examiners issued intermediate reports setting forth their findings and recommendations in 328 cases—an increase of about 154 percent over the 129 cases in which such reports were issued during the fiscal year 1948.

Back-pay awards totaling \$605,940 were granted during the fiscal year 1948-49 to 1,994 employees, to reimburse them for loss of wages suffered as a result of employer discrimination. Many of these workers were included among the 1,458 employees who were reinstated in their jobs to remedy discriminatory discharges, or among the 96 who were placed on preferential hiring lists.

As a result of NLRB action, collective bargaining was resumed in 228 cases in which the employer had been charged with refusal to bargain, and in 13 cases in which a union had been charged with such refusal. Unions found to be dominated by employers were disestablished in 38 cases. Notices promising cessation of illegal practice were posted by employers in 778 cases and by unions in 75 cases.

Charges against employers were involved in 4,154 (about 78 percent) of the 5,314 unfair-labor-practice cases filed during the 1949 fiscal year, and against unions in the other 1,160 cases.

The most common unfair-labor-practice charge against employers, made in 2,863 (68.9 percent) of the cases, was that of discriminating in employment on a basis of union membership or the lack of it. Refusal to bargain with the representatives chosen by employees was the next most common charge against employers—1,070 (about 26 percent) of the cases. Employers were accused of interfering in the formation of a labor organization among their employees, or of dominating such an organization, in 534 instances.

Discrimination in employment was also the most common charge against unions. They were accused of causing or attempting to cause an employer to discriminate against employees on the basis of union membership, or the lack of it, in 675 (58.2 percent) of the cases against unions. Restraint or coercion of employees by unions was alleged in 644 cases. Charges of secondary boycott were made against unions in 252 cases (about 22 percent); and of engaging in jurisdictional strikes or boycotts, in 72 cases.

Reduction of Backlog in Railroad Grievance Cases¹

THE HEAVY DOCKET of the National Railway Adjustment Board's First Division has been cited as a contributing factor in the development of paralyzing rail strikes which had their origin in long-standing, unsettled grievance claims. This division deals with disputes concerning engineers, firemen, hostlers, conductors, trainmen, outside hostler helpers, and yard-service workers. On June 30, 1949, it had a backlog of pending cases sufficient to keep it busy for an estimated 4 years.

Certain important changes designed to expedite First Division work were provided for by two agreements arrived at on May 19, 1949, after a series of conferences between officers of the train and engine

¹ Data are from the Fifteenth Annual Report of the National Mediation Board, including the Report of the National Railroad Adjustment Board, for the Fiscal Year Ended June 30, 1949. Washington 1949.

service brotherhoods and employer representatives. One of these revised the procedural rules for preparation and submission of disputes to the First Division. The other provided for the setting up under the Railway Labor Act of two supplemental boards of four men each, these boards to be given authority to handle cases currently on the First Division's docket and such additional cases as it might later assign to them.²

The National Mediation Board is hopeful that the revised procedures will prove effective in enabling the First Division of the National Railway Adjustment Board to keep abreast of its heavy docket. This in turn, it hopes, will effect the elimination of many strikes and strike threats resulting from unsettled grievances.

The National Railway Adjustment Board, established under the 1934 amendments to the Railway Labor Act, functions through four divisions, each having jurisdiction over adjustment of disputes involving a specified group of employees. Carriers and employees have equal representation in the membership of each division, and a neutral referee may be selected when a deadlock occurs.

Jurisdiction of the divisions, other than the first, is as follows: Second Division, controversies involving machinists, boilermakers, and other railroad shop workers; Third Division, station, tower, and telegraph employees, train dispatchers, maintenance-of-way men, signalmen, dining-car employees, sleeping-car conductors, porters, and maids; and Fourth Division, workers for carriers directly or indirectly engaged in transportation by water, and all other employees not under jurisdiction of some other division.

1949 Report

The following tabulation shows that a heavy load of cases devolved upon the First Division during the year 1948-49, and that more than twice the number docketed were pending on June 30, 1949. A backlog of pending disputes had been accumulating for the past 3 years. The annual

report of the National Mediation Board, which included that of the National Railway Adjustment Board, stated that "based upon the number of cases closed during the past year, the [First Division of the] Board had on hand at year's end nearly 4 years' work." Throughout the previous years, the First Division had not been able to arrive at methods by which procedural changes or other measures could "break the log jam."

	Docketed during fiscal year 1948-49	Cases closed	Pending at end of year, June 30, 1949
First Division.....	1,226	731	2,842
Second Division.....	63	73	-----
Third Division.....	495	544	362
Fourth Division.....	91	61	33

Situations caused by the inability of the First Division to prevent an accumulation of grievances were illustrated, the report stated, by a strike of enginemen and trainmen which, in March 1949, immobilized the Wabash Railway System for a period of 8 days. The dispute involved numerous grievance claims that were incorporated in a strike ballot on November 1, 1948, of which 149 remained unsettled when the strike became effective 4½ months later. "Time claims, grievances, run-around, and claims of like nature, properly referable to the First Division," were involved. The Emergency Board appointed by the President in this instance³ was critical both of management and of the unions for allowing the situation to develop. Its report stated:

If it was the failure of management to give early attention and proper consideration to these claims as they arose, or if it was its fault in some other respect or respects, what happened here ought to be a warning to these and other carriers of the probable consequences of like failures and faults.

If it was the failure of the organization to take advantage of the legal processes of progressing claims to the Adjustment Board because of seeming delay entailed in the process, or some other fault, we think their judgment was fallacious. This Board is of the opinion that a strike to enforce claims without adjudication, where the law provides for adjudication, not only is hurtful to the general economy, but is also damaging to the cause of labor.

² The National Mediation Board was granted an appropriation to be used for these supplemental boards in October 1949 (Public Law 430, 81st Cong., 1st sess.), and by January 1950, they were functioning.

³ Appointed under Executive order of March 15, 1949. Report was made to the President on April 6, 1949.

Hosiery Manufacture: Earnings in October 1949¹

EARNINGS LEVELS in full-fashioned hosiery mills in October 1949 were generally higher than in seamless hosiery mills. The two branches of the industry differ widely with respect to a number of factors which have a marked influence on their wage structures.

Full-fashioned hosiery establishments are located to a greater extent in larger cities, and employ, on the average, larger numbers of workers than seamless hosiery mills. Full-fashioned hosiery is made principally for women and generally involves the use of more costly materials (principally nylon). Greater skill is required in its processing. (The use in the accompanying tables of the same job titles for the two branches of the industry does not imply exact comparability.) Unionization is somewhat more prevalent in full-fashioned mills, although comparatively few mills in the South in either branch of the industry were unionized at the time of the Bureau's most recent study.²

Approximately two-thirds of the workers in the selected full-fashioned hosiery occupations were women; the percentage was slightly higher (about 71 percent) in seamless hosiery occupations. Most knitters in full-fashioned hosiery mills were men, but a majority of the seamless-hosiery knitters, in 3 of the 5 areas studied, were women.

About three-fourths of the mill workers in both full-fashioned and seamless hosiery mills were paid on an incentive basis. Knitting-machine adjusters and fixers constituted the only selected occupation for which pay was predominantly on a time-rate basis.

¹ By Fred W. Mohr of the Bureau's Division of Wage Statistics. Data were collected by field representatives under direction of the Bureau's regional wage analysts. Greater detail on wages and wage practices for each area included in the study is available on request.

² In the occupational study, the number of areas covered, and estimated employment in these areas in October 1949, were: Full-fashioned hosiery, 5 areas, 29,000 workers; men's seamless hosiery, 3 areas, 12,000 workers; and children's seamless hosiery, 2 areas, 3,400 workers. Mills employing fewer than 21 workers were excluded from the study.

A supplementary study was made to provide a distribution of hourly earnings irrespective of occupation, in men's seamless hosiery mills employing 21 or more workers. Eighty-four of the estimated 203 plants in the industry (accounting for 60 percent of the total employment) were covered.

A scheduled workweek of 40 hours, in October 1949, was reported for virtually all the seamless hosiery mills and for about seven-eighths of those producing full-fashioned hosiery. Paid vacations of 1 week after 1 year of service were granted to mill workers by 68 of the 79 full-fashioned hosiery mills; in 38 of these establishments, 2 weeks' vacation with pay was provided after 5 years' service. Slightly more than half of the seamless hosiery mills studied (36 of 66) provided paid vacations for mill workers, typically 1 week after a year of service; in 14 mills, however, workers with 5 years of service received 2-week vacations.

Paid holidays, usually five in number, were reported for millworkers in 34 of the 79 full-fashioned hosiery mills; only 2 of the 66 seamless-hosiery mills provided paid holidays for millworkers. Holiday and vacation provisions for office workers were generally more liberal than for millworkers.

All except 4 of the full-fashioned hosiery mills operated a second shift during the period studied; 35 granted extra pay for such work, typically 5 cents an hour. Premium pay for third or other shift work was also provided in 28 of the 53 mills operating more than two shifts. About nine-tenths of the seamless-hosiery mills were reported as operating a second shift; in 8 establishments premium pay was received for such work. Extra pay was reported for 9 of the 40 mills operating third or other shifts.

Comparisons of hourly earnings in October 1949 with those reported in a similar study in October 1948 indicate relatively little change, other than such variations as may be considered typical in an industry in which a large proportion of the workers are paid on an incentive basis. Incentive workers' earnings usually fluctuate from period to period in the absence of rate changes. They are affected by changes in individual effort, production flows, quality variations in materials, and other factors. Occupational averages in both full-fashioned hosiery and seamless-hosiery mills showed decreases as well as increases. For almost half of the full-fashioned hosiery occupations and about three-fourths of the seamless-hosiery jobs, changes in area job averages amounted to less than 4 percent.

Full-Fashioned Hosiery

Occupational averages of the full-fashioned hosiery mill jobs for which comparisons could be made, were generally highest in Reading and lowest in the Hickory-Statesville area. Earnings in Philadelphia usually ranked next to those in Reading; men's average earnings were typically higher in Charlotte than in Burlington-Greensboro, but for a majority of the selected women's occupations the relationship was reversed in those two areas.

TABLE 1.—*Straight-time average hourly earnings¹ for selected occupations in the full-fashioned hosiery industry in selected areas, October 1949*

Occupation and sex	Burlington-Greensboro, N. C.	Charlotte, N. C.	Hickory-Statesville, N. C.	Philadelphia, Pa.	Reading, Pa.
<i>Plant occupations: Men</i>					
Adjusters and fixers, knitting machine (4 years' experience or more)	\$1.98	\$2.13	\$1.79	\$1.80	\$1.96
Boarders, machine		1.22		1.54	1.77
Knitters, single-unit or backrack:					
42 gage, 24 sections or less	(9)	(9)	(9)	(9)	2.13
45 gage, 24 sections or less	1.73	(9)	1.36	2.08	2.38
46 gage, 26 sections or more	(9)	2.09	(9)	2.32	(9)
51 gage, 24 sections or less	1.85	1.90	1.73	2.25	2.10
61 gage, 26 sections or more	2.19	2.18	2.00	2.81	(9)
60 gage, 26 sections or more	(9)	(9)	(9)	(9)	2.71
Preboarders	1.30	1.42	1.28	1.45	1.48
<i>Plant occupations: Women</i>					
Boarders, machine	1.31	1.21	1.23	1.60	1.72
Folders	1.10	.97	.87	1.07	1.23
Inspectors, hosiery	1.13	1.11	.95	.96	1.15
Loopers, toe only (1 year's experience or more)	1.31	1.24	1.15	1.34	1.41
Menders, hand	1.17	(9)	1.18	1.25	1.31
Pairers	1.01	1.08	.93	1.14	1.20
Preboarders	(9)	1.24	(9)	1.50	1.42
Seamers	1.16	1.22	1.03	1.22	1.33
<i>Office occupations: Women</i>					
Clerks, pay-roll	1.01	1.07	.96	1.01	1.00
Clerk-typists	(9)	(9)	(9)	.94	.85
Stenographers, general	1.08	(9)	1.00	1.14	1.08

¹ Excludes premium pay for overtime and night work.

² Insufficient data to justify presentation of an average.

Hourly earnings of knitters of full-fashioned hosiery (on single-unit machines and those with back-rack attachments) varied in the five areas studied in October 1949. Men knitters, producing 45-gage hosiery, on machines having 24 sections or less, received average earnings of \$1.36 in the Hickory-Statesville (N. C.) area, \$1.73 in the Burlington-Greensboro (N. C.) area, \$2.08 in Philadelphia, and \$2.38 in Reading (Pa.). Knitters making 51-gage hosiery (26 sections or more) averaged \$2.09, \$2.18, and \$2.19, in the three North Carolina areas, and \$2.81 in Philadelphia. Average earnings of men preboarders—

the lowest-paid among the selected men's occupations in four of the five areas—ranged from \$1.28 in Hickory-Statesville to \$1.48 in Reading.

Women seamers, the largest group studied in most areas, averaged \$1.03 in Hickory-Statesville, \$1.16 in Burlington-Greensboro, \$1.22 in both Charlotte and Philadelphia, and \$1.33 in Reading. Pairers had the lowest average hourly earnings among the mill jobs studied in the Burlington-Greensboro area (\$1.01); folders, the lowest in Charlotte (\$0.97) and in Hickory-Statesville (\$0.87); inspectors had the lowest hourly averages in Philadelphia and Reading (96 cents and \$1.15, respectively). In a majority of the areas, women machine boarders had the highest average earnings among the selected women's occupations, ranging from \$1.21 in Charlotte to \$1.72 in Reading.

Seamless Hosiery

Knitting machine adjusters and fixers were the highest-paid group of workers studied in seamless-hosiery mills in October 1949 (see table 2). Their average earnings ranged from \$1.17 in children's hosiery mills in Chattanooga, Tenn., to \$1.49 in men's hosiery mills in the Winston-Salem-High

TABLE 2.—*Straight-time average hourly earnings¹ for selected occupations in the seamless hosiery industry in selected areas, October 1949*

Occupation and sex	Hickory-Statesville, N. C.	Men's hosiery		Children's hosiery	
		Reading, Pa.	Winston-Salem-High Point, N. C.	Chattanooga, Tenn.	Winston-Salem-High Point, N. C.
<i>Plant occupations: Men</i>					
Adjusters and fixers, knitting machine (4 years' experience or more)	\$1.36	\$1.28	\$1.49	\$1.17	\$1.37
Boarders, hand	.89	1.08	1.10	.90	.94
Knitters, automatic	.91	.87	1.08	(9)	.94
<i>Plant occupations: Women</i>					
Boarders, hand	.75	(9)	1.00	.77	.79
Boxers	(9)	.74	(9)	(9)	(9)
Folders	(9)	.82	(9)	(9)	(9)
Folders and boxers ²	.75	(9)	.97	.85	.78
Inspectors, hosiery	.71	.72	.90	(9)	.70
Knitters, automatic	.85	.86	1.00	(9)	(9)
Knitters, string	(9)	(9)	1.04	(9)	(9)
Knitters, transfer	.73	(9)	(9)	.87	.86
Loopers, toe only (1 year's experience or more)	.81	.93	.99	.85	.94
Menders, hand	.66	.80	.85	.76	.69
Pairers	.73	.75	.87	.82	.83
<i>Office occupations: Women</i>					
Clerks, pay-roll	.97	.73	1.02	.93	(9)
Clerk-typists	.86	(9)	.93	.88	(9)
Stenographers, general	.93	.90	.98	(9)	(9)

¹ Excludes premium pay for overtime and night work.

² Insufficient data to justify presentation of an average.

² Workers performing a combination job of folding and boxing.

Point area of North Carolina. Men automatic knitters in men's seamless hosiery mills earned, on the average, 87 cents an hour in Reading, and 91 cents in Hickory-Statesville. In Winston-Salem-High Point they averaged \$1.08 in men's hosiery mills and 94 cents in the children's hosiery.

Women loopers, the selected occupation which had the largest number of workers in both men's and children's hosiery mills, averaged 81 cents an hour in Hickory-Statesville, 85 cents in Chattanooga, and 93 cents in Reading. In Winston-Salem-High Point their averages were 94 cents in mills producing children's hosiery and 99 cents in those making men's hosiery. Women operating automatic knitting machines averaged from 1 to 8 cents an hour less than men operators in the same areas. Hand menders had average earnings ranging from 66 to 85 cents an hour, and were the lowest-paid group in each area except Reading where inspectors received the lowest average earnings.

Plant-worker earnings in the men's seamless-hosiery industry averaged 89 cents hourly; nearly a third of the workers earned less than 75 cents.

Women, representing about two-thirds of the workers in the men's seamless-hosiery industry, and generally found in the less-skilled jobs, had average earnings of 82 cents an hour. About 83 percent of them earned less than \$1 an hour, and about 40 percent earned less than 75 cents. Men averaged 22 cents more than women; over half of the men earned as much as \$1 an hour.

The Middle Atlantic and Southeast regions contained about three-fourths of the workers in the industry; the levels of wages paid to workers in the two regions differed very little. Plant workers averaged 90 cents an hour in the Middle Atlantic region and 88 cents in the Southeast. Men averaged \$1.06 in the Middle Atlantic region and \$1.03 in the Southeast, and women 83 and 81 cents an hour, respectively.

TABLE 3.—*Percentage distribution of plant workers in men's seamless hosiery establishments by straight-time average hourly earnings¹ and sex, United States and selected regions, October 1949*

Average hourly earnings ¹	United States ²			Middle Atlantic			Southeast		
	All workers	Men	Women	All workers	Men	Women	All workers	Men	Women
40.0-42.4 cents	0.4	(1)	0.6				5.8	0.1	1.1
42.5-44.9 cents	.1	(1)	.1				.1	(1)	.2
45.0-47.4 cents	.4	0.2	.6				.6	.3	.5
47.5-49.9 cents	.2	(1)	.3	0.1		0.2	.3	.1	.4
50.0-52.4 cents	2.0	1.7	2.2	.3	0.2	.3	3.0	2.6	3.2
52.5-54.9 cents	.6	.2	.7	.1			.9	.4	1.2
55.0-57.4 cents	2.2	1.6	2.4	3.1	3.3	3.1	2.4	1.6	2.8
57.5-59.9 cents	1.4	.3	1.9	.7	.7	.8	1.5	.3	2.2
60.0-62.4 cents	5.3	2.4	6.7	8.5	2.4	10.9	4.7	2.9	5.6
62.5-64.9 cents	2.9	.6	4.0	3.4	.9	4.4	3.0	.6	4.3
65.0-67.4 cents	3.6	1.6	4.6	5.1	2.3	6.2	3.2	1.4	4.1
67.5-69.9 cents	3.0	1.3	3.8	3.8	1.9	4.5	3.3	1.5	4.2
70.0-72.4 cents	5.3	2.8	6.4	4.4	1.6	5.6	5.1	3.5	5.9
72.5-74.9 cents	4.2	2.5	5.0	2.4	1.1	2.9	4.0	2.3	4.9
75.0-77.4 cents	6.0	4.4	6.7	5.0	4.6	5.1	6.2	4.5	7.1
77.5-79.9 cents	4.0	2.2	4.9	3.0	1.2	3.6	4.6	2.6	5.6
80.0-84.9 cents	9.2	6.7	10.7	7.4	4.2	9.2	7.3	10.4	10.4
85.0-89.9 cents	8.4	7.5	8.7	9.1	7.6	9.5	7.4	6.8	7.7
90.0-94.9 cents	7.7	6.5	7.6	8.3	8.6	8.2	6.7	5.7	7.2
95.0-99.9 cents	5.4	5.8	5.2	6.3	6.9	6.1	4.8	5.1	4.7
100.0-104.9 cents	5.8	7.9	4.8	6.7	8.1	6.2	5.7	8.4	4.3
105.0-109.9 cents	4.1	4.9	3.8	4.3	4.6	4.2	4.1	5.1	3.6
110.0-114.9 cents	3.6	5.5	2.6	3.5	4.2	3.2	3.6	5.5	2.5
115.0-119.9 cents	2.6	4.0	2.0	2.4	3.7	1.9	2.7	3.9	2.0
120.0-124.9 cents	2.2	4.3	1.3	1.9	2.1	1.8	2.0	3.5	1.2
125.0-129.9 cents	2.2	5.0	1.0	1.4	2.8	.8	2.3	4.6	1.2
130.0-134.9 cents	1.5	3.1	.7	1.7	4.1	.8	1.4	2.7	.7
135.0-139.9 cents	1.4	3.7	.3	2.4	7.3	.3	1.2	2.6	.4
140.0-144.9 cents	1.0	2.5	.3	1.0	3.0	.2	1.0	2.3	.3
145.0-149.9 cents	.6	1.6	.2	.7	2.4	(1)	.8	1.8	.3
150.0-159.9 cents	1.4	4.1	.2	1.6	5.1	.2	1.6	4.3	.2
160.0-169.9 cents	.7	2.1	.1	.6	2.0	.1	.8	2.3	(1)
170.0-179.9 cents	.5	1.4	(1)	.3	1.1		.7	1.9	(1)
180.0-189.9 cents	.3	.8	(1)	.2	.5	.1	.3	.9	
190.0-199.9 cents	.1	.2	(1)	(1)	.1	(1)	.1	.2	
200.0 cents and over	.1	.6		.3	1.1		.1	.4	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	29,946	9,479	20,467	6,163	1,771	4,392	16,738	5,706	11,032
Average hourly earnings ¹	\$0.89	\$1.04	\$0.82	\$0.90	\$1.06	\$0.83	\$0.88	\$1.03	\$0.81

¹ Excludes premium payment for overtime and night work. Learners are included in these distributions.

² Includes data for other regions in addition to those shown separately.

³ Less than 0.05 of 1 percent.

Footwear Manufacturing: Earnings in October 1949¹

WAGE LEVELS of shoe workers in women's cement-process plants were generally higher in Boston and Haverhill than in other New England areas. Men employed as machine cutters had average earnings in October 1949 ranging from \$1.50 an hour in Worcester to \$1.69 in Boston. The levels of hourly earnings of men in other incentive jobs in the 6 New England areas studied, varied from \$1.63 in Auburn-Lewiston, Maine, and southeastern New Hampshire to \$1.96 in Boston for edge trimmers; from \$1.59 in Worcester to \$1.99 in Haverhill, Mass., for machine side lasters; and from \$1.35 in Worcester to \$1.64 in Boston for treers. In numerically important women's jobs, remunerated on a piecework basis, fancy stitchers earned, on the average, from \$1.09 in Lynn and Worcester, Mass., to \$1.32 in Boston, and top stitchers from \$1.12 in southeastern New Hampshire to \$1.62 in Boston. Average hourly earnings of floor girls, predominantly time workers, showed the narrowest spread among the selected plant jobs, ranging from 88 cents in Auburn-Lewiston, Maine, to 96 cents in Worcester.

Earnings in the production of women's cement-process shoes were highest in New York City and lowest in Missouri (except St. Louis). Occupational averages in New York City ranged from 97 cents an hour for floor boys to \$2.46 for women top stitchers and exceeded \$2 an hour in 8 of 16 plant jobs. Average earnings of Los Angeles workers ranked second and were higher than those in New England areas. St. Louis workers had earnings which, on the average, were somewhat comparable to those in Auburn-Lewiston and Worcester.

Of the three major centers in the manufacture of men's Goodyear welt shoes, wage levels in Brockton, Mass., were highest in 9 of 15 plant jobs and varied from 88 cents an hour for floor girls to \$1.89 for machine edge trimmers. In seven occupations average earnings in Illinois exceeded

¹ By Charles Rubenstein of the Bureau's Division of Wage Statistics. Data were collected by field representatives under the direction of the Bureau's regional wage analysts. More detailed information on wages and related practices for each of the areas studied is available upon request.

The study embraced the manufacture of selected types of footwear in 13 major production areas. In October 1949 approximately 65,000 workers were employed in the industry divisions covered. Establishments employing fewer than 21 workers were excluded from the study.

those in Worcester by amounts ranging from 3 to 25 cents an hour but were from 1 to 15 cents below in five other occupations for which comparisons could be made.

In jobs common to the various types of shoe manufacture, the level of earnings of workers producing children's stitchdown shoes in New York City was considerably below that for workers on women's cement-process shoes in the same city. This level, however, was generally higher than those in the three men's Goodyear-welt centers. The lowest wage levels in the study were found in the children's welt shoe industry in southeastern Pennsylvania, where workers averaged from 78 cents an hour as floor boys to \$1.27 as machine edge trimmers.

With few exceptions, earnings levels of office workers were below those of women plant workers. Pay-roll clerks averaged from 74 cents in Auburn-Lewiston to \$1.22 an hour in Los Angeles and general stenographers from 78 cents in Auburn-Lewiston to \$1.20 in New York City. Average earnings in office occupations exceeded \$1 an hour in only Los Angeles, New York City, and St. Louis.

Comparisons of earnings in October 1949 with those reported in a similar study in October 1948 disclosed that about three-fifths of the area plant job averages changed less than 5 percent during the year. The proportion of incentive workers in the footwear industry is high and it is typical for the earnings of such workers to fluctuate from one period to another, even in the absence of interim wage adjustments. Some of the factors influencing incentive earnings are variations in the flow of work, style changes, changes in the quality of materials, and variations in labor effort.

Related Wage Practices

Paid holidays, ranging in number from 1 to 7 days a year, were granted to plant workers by almost four-fifths of the establishments studied. The most common practice, which provided for six paid holidays, applied to workers in over half of the establishments. Only 2 of the 18 shoe plants in the Brockton, Mass., area and 1 of the 11 in southeastern Pennsylvania had provisions for granting paid holidays to plant workers. Nearly 90 percent of the plants in other New England shoe

centers and all the plants in New York City and St. Louis had established paid holiday policies. More liberal provisions for paid holidays applied to office workers; over 95 percent of the establishments studied granted from 3 to 12 days a year. In half or more of the plants in Brockton, Haverhill, and Lynn, Mass., office workers received nine paid holidays. The most common practice, however, provided 6 days, similar to that for plant workers.

Paid vacations for plant workers were reported by 188 of the 193 establishments included in the

study. In all instances, 1 week of vacation was allowed after 1 year's service. All establishments in the Brockton, Mass., New York City, and St. Louis areas and the majority of plants in Illinois, Los Angeles, and Missouri (except St. Louis) granted 2 weeks of paid vacation after 5 years of service. Office workers in virtually all plants received at least 1 week of vacation with pay after a year's employment; in 70 establishments the length of paid vacation was 2 weeks. In some areas, these workers were allowed the second week of paid vacation after 2 or 3 years' service.

Straight-time average hourly earnings¹ in selected occupations in footwear manufacturing, by process and wage area, October 1949

Occupation and sex	Women's cement process shoes										Men's Goodyear welt shoes				Children's welt shoes	Children's stitch-down shoes	New York, N.Y. ²
	New England										Brockton, Mass.	Worchester, Mass.	Illinois	South-eastern Pennsylvania	New York, N.Y.		
	Auburn-Lewiston, Maine	Boston, Mass.	Haverhill, Mass.	Lynn, Mass.	South-eastern New Hampshire	Worcester, Mass.	New York, N.Y. ²	Missouri, (except St. Louis)	St. Louis, Mo.	Los Angeles, Calif.							
<i>Plant occupations, men</i>																	
Assemblers for pullover, machine	\$1.78	\$1.74	\$1.78	\$1.87	\$1.50	\$1.59	\$1.94	\$1.19	\$1.57	(1)	\$1.70	\$1.46	\$1.69	\$1.65	-----	-----	
Bed-machine operators	1.55	1.63	1.86	1.57	1.67	1.61	1.97	1.32	1.61	(1)	1.47	1.48	1.73	1.15	-----	-----	
Cutters, vamps and whole shoe:																	
Hand	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1.47	(1)	1.76	1.00	-----	-----	
Machine	1.64	1.69	1.63	1.63	1.52	1.50	2.04	1.26	1.52	\$1.83	1.65	1.54	1.60	1.09	\$1.82	-----	
Edge trimmers, machine	1.63	1.98	1.93	1.67	1.63	1.68	2.40	1.33	1.72	2.03	1.89	1.71	1.77	1.27	1.90	-----	
Floor boys	(1)	.86	.87	.98	.80	.92	.97	.82	(1)	1.03	.91	.99	.84	.78	.79	-----	
Goodyear stitchers:																	
Mechanics, maintenance	1.63	(1)	1.78	1.69	1.49	1.54	1.93	1.31	1.48	1.95	1.68	1.54	1.47	1.10	(1)	1.91	
Side lasters, machine	1.84	1.92	1.99	1.65	1.65	1.59	2.17	1.30	1.61	(1)	1.65	1.52	1.51	1.05	-----	-----	
Sole attachers, cement	1.33	1.52	1.58	1.70	1.43	1.45	2.20	1.05	1.57	1.63	-----	-----	-----	1.00	-----	-----	
Treers	1.38	1.64	1.57	1.55	1.46	1.35	1.91	1.32	1.51	(1)	1.43	1.46	-----	.96	1.13	1.87	
Vampers																	
Wood-heel-seat fitters:																	
Hand	(1)	(1)	(1)	1.81	(1)	(1)	1.90	1.15	1.62	(1)	-----	-----	-----	-----	-----	-----	
Machine	1.45	1.67	1.53	1.75	1.39	1.51	2.23	1.09	1.64	(1)	-----	-----	-----	-----	-----	-----	
<i>Plant occupations, women</i>																	
Fancy stitchers	1.14	1.32	1.19	1.00	1.11	1.00	(1)	.87	1.18	1.63	1.17	1.14	1.04	.94	-----	-----	
Floor girls	.88	.89	.93	.95	.92	.96	(1)	.81	1.00	1.11	.88	.85	.91	.81	-----	-----	
Sole attachers, cement																	
Top stitchers	1.20	1.62	1.29	1.17	1.12	1.15	2.46	.90	1.16	1.67	1.12	1.05	1.14	.92	1.48	-----	
Treers																	
Vampers	1.14	(1)	1.36	1.08	1.00	1.12	1.65	.93	1.25	(1)	1.37	1.19	1.22	.95	1.41	-----	
<i>Office occupations, women</i>																	
Clerks, pay-roll	.74	.83	.83	.84	.79	.81	1.10	.86	.84	1.22	.81	.83	(1)	.89	1.00	-----	
Clerk-typists	(1)	.76	(1)	.78	.77	(1)	1.01	.68	.85	(1)	.71	(1)	.87	.89	(1)	-----	
Stenographers, general	.78	(1)	.90	.89	.87	(1)	1.20	.88	1.01	(1)	.85	(1)	.84	(1)	.86	1.16	

¹ Excludes premium pay for overtime and night work.

² Study limited to women's street shoes, primarily of cement process manufacture.

³ Insufficient data to justify presentation of an average

Labor-Management Disputes in March 1950

A RAPID SUCCESSION of developments culminated in settlement of the coal dispute in early March. Strike activity during the month, therefore, declined substantially. The Chrysler stoppage, continuing from late January, was the only major stoppage in effect throughout the month.

Coal Settlement

Several important events immediately preceded the March 5 coal agreement. On March 2, Federal Judge Richmond B. Keech freed the United Mine Workers of contempt charges arising out of the miners' refusal to return to work as requested by union officials, in conformance with the provisions of a temporary restraining order issued on February 11. Judge Keech's opinion stated: "Where the union has sent out communications such as are included in this record, the apparent good faith of such communications must be controverted * * * by clear and convincing evidence." However, Judge Keech found "insufficient" evidence submitted to support the charge that the union was guilty of civil or criminal contempt.

Following this decision, President Truman sent a message to Congress asking for legislation to permit seizure of the coal mines in view of the "dangerous" curtailment of coal production. His message stated that the events since the issuance of the temporary restraining order "give us no assurance that court action under present law can, in fact, end the work stoppage in time to avert exhaustion of our coal supplies." The President's bill provided for the establishment of impartial boards during the period of Government possession "to make recommendations concerning fair and just compensation for the use of the property of the mine owners and for the work of the mine employees." Under the proposed measure, negotiation of any contract between the Government and representatives of the miners was prohibited.

Describing the coal industry as "a sick industry," the President recommended that the temporary expedient of seizure should be accompanied by a "positive and constructive effort to get at the root of the trouble." He pointed out that the "recurrent break-downs" in labor-management relations

in this industry are "only symptoms of profound and long-standing economic and social difficulties in which the industry has become involved." He recommended, therefore, that Congress establish a commission of inquiry "to make a thorough study of the coal industry, in terms of economic, social and national security objectives."

A few hours later, union and operator representatives announced that they had reached agreement on the terms of the "National Bituminous Coal Wage Agreement of 1950." The contract is to be effective until July 1, 1952, with reopening on wages permitted after April 1, 1951.

The new contract provides for an increase in the basic daily wage from \$14.05 to \$14.75 and in the employers' payments to the welfare and retirement fund from 20 to 30 cents per ton. The union shop is continued "to the extent * * * permitted by law;" the "willing and able" clause of the old contract is eliminated; and "memorial period" stoppages are limited to 5 days a year.

An agreement covering the anthracite miners, patterned largely after the bituminous contract, was signed March 9.

Automobiles

Hope for an immediate settlement of the 2-month-old Chrysler stoppage when the company made a new offer on March 24 proved to be premature. The company offered to establish a 30-million-dollar pension trust fund to guarantee \$100 a month pensions, including Federal social security payments, to workers 65 years old after 25 years' service. This was offered in a 5-year contract, which would have provided for joint administration of the plan with the union, eased eligibility requirements for pensions, and liberalized hospital-medical-insurance benefits.

The United Automobile Workers (CIO) rejected the company offer, but indicated "its willingness to accept lump-sum payments into a pension trust fund in place of the union's initial proposal of cents-per-hour payments into the trust fund." It indicated its willingness to accept this approach "provided, however, that the lump-sum payments are in sufficient amount to fund credited service on an actuarially sound basis." Conceding that the company proposal was "a step in the right direction," the union stated that the proposed fund fell short by \$16,020,000 of the fund required "to guarantee pension benefits to Chrysler workers

on an actuarially sound basis comparable to the security which Chrysler competitors are providing their employees under the pension agreements with the UAW-CIO."

Further differences developed on the company offer during subsequent meetings, which appeared to leave the parties as far apart as before.

Several other important collective-bargaining developments occurred in the automobile industry during the month. The Ford Co. and the UAW successfully concluded agreement on divergent interpretations of the memorandum of accord reached by the parties last September on pensions and insurance. They resolved their differences by agreeing on unfixed but actuarially sound payments instead of fixed cents-per-hour payments. The parties also agreed that actuarial studies of current and past service costs are to be made by the company if Federal social security benefits are increased. Within 4 months of such a change, the company is to give the union information on any resultant reduction of payments into the fund.

The UAW and the Nash-Kelvinator Corp. agreed during March to establish a pension and insurance program. The plan provides for \$100 a month payments, including social security payments, to workers retiring at age 65 with 25 years of service. Under the agreement, the company will make fixed payments of 7 cents per hour into the pension fund regardless of changes in Federal social security benefits.

The General Motors Corp. and the UAW opened negotiations on the terms of a new contract on March 29. The current 2-year agreement, covering 260,000 workers, expires on May 29. Union proposals include \$125 a month pension, elimination of the cost-of-living escalator clause on wages, a 9-cents per hour wage increase, and a union shop.

Other Developments

Telephone industry negotiations continued during March. In New Jersey, the facilities of the New Jersey Bell Telephone Co. were seized on March 1 under the provisions of the State's

public utilities antistrike law, and a compulsory arbitration board was appointed to decide the disputed issues.

A three-man emergency board¹ was named by President Truman on March 22 to investigate a dispute between western railroads and the Switchmen's Union of North America (AFL). The union asked for a 40-hour week with no reduction in pay, instead of the existing 48-hour week. The members of the same board are also conducting hearings in the Nation-wide railway dispute over proposals made by the Brotherhood of Railroad Trainmen and the Order of Railway Conductors for reduction in the workweek, wage increases, and changes in working rules.

The successful efforts of local citizens in aiding in the settlement of an 8-month stoppage involving the Continental Paper Co., Ridgefield Park, N. J., and the United Paper Workers (CIO) brought this local situation into prominence during the month. The company had announced the permanent closing of the plant, because of the stoppage. The agreement which averted the shutdown was arranged between top management officials and top union officials, including the international president of the union.

Other important developments during the month included the successful conclusion of agreements on welfare plans between the following: Southern Conference of Teamsters and the Central States Drivers Council (AFL) covering 30,000 truck drivers in 18 States; three rug companies, employing 12,000 workers and the Textile Workers Union (CIO); the Firestone Tire and Rubber Co. and the United Rubber Workers (CIO), covering 20,000 workers; and the Consolidated Edison Co. of New York, and the Utility Workers Union (CIO), covering 30,000 workers.

Houston, Tex., building contractors and 23 AFL unions signed a "treaty" effective until June 30, 1951, requiring approval by three-fourths of the unions before strike action may be taken by any of the signatory groups.

¹ Members of the board are Roger I. McDonough, Chief Justice of the Utah Supreme Court; Mart. J. O'Malley, Indiana Supreme Court Justice, and Gordon S. Watkins, professor of economics, University of California at Los Angeles.

Technical Notes

EDITOR'S NOTE.—*The first 2 technical notes which follow complete the series of 13 articles covering the major statistical series of the Bureau of Labor Statistics. The first note appeared in the Monthly Labor Review for September 1949 and, with the exception of the December issue, each succeeding number has contained one or more of the technical descriptions. In presenting these articles which explain the methodology and limitations of all major statistical series compiled by the Bureau, the object has been to supply the explanatory information in a uniform manner and as simply as possible. The 13 notes will be made available in a single publication.*

XII. Occupational Wages: Establishment Sampling¹

SAMPLING is necessary in making occupational wage surveys because of the large number of establishments in many industries. This need exists even when a narrow industrial classification is studied. For instance, approximately 2,000 firms, employing 8 or more workers producing women's and misses' dresses, are located in the New York City area alone. Obviously they must be surveyed on a sample basis, if personal visits are involved. Otherwise an unduly large proportion of the limited funds available to the Bureau of Labor Statistics for such work would be expended on a single industry-area group. Other reasons for sampling are to insure that a survey yields something more than an informed guess, and that reliable results are obtained at minimum cost.

It is possible to reduce sources of error other than those ascribed to sampling by devoting a larger proportion of time to proper occupational classification, careful editing for accuracy of data and the like, than would be possible without the

use of sampling. Otherwise errors, largely unpredictable in their effects, might be more serious than sampling error. Hence, sampling sometimes leads to increased accuracy, not less, as is often assumed. It also reduces the time necessary to collect and process data; even with unlimited resources, the smaller the sample the earlier the publication of results.

Collection of Information

The choice among various methods of collecting wage information depends on the type of industry surveyed, and the nature of the data sought. Each method has its appropriate sampling procedure, and considerations important in one case may be trivial in another.

Thus, mail questionnaire surveys are suitable if detailed occupational data are not desired and if incentive methods of pay are uncommon. In dealing with a complex occupational structure—in which strict definitions of occupations are essential and information on practices such as vacations and sick leave is sought—personal visit surveys have been found desirable. In both cases, the sampling unit is the establishment, rather than the individual. Most industries do not have central sources showing individuals' names and, if they did, the volume of collection work would make surveys on such a basis impossible in most cases. Surveys limited to a single occupational group, such as engineers, are an exception. For this profession, lists of names can be assembled and the individuals can be approached directly, by mail questionnaire. The sampling problems involved differ greatly in each particular survey, and are not discussed here.

In establishment sampling for wage studies, no particular problem of conserving resources is encountered in most mail questionnaire surveys. The number of firms in a given industry and area is generally not so great that sizable economy in

¹ By Samuel E. Cohen of the Bureau's Division of Wage Statistics.

time or money can be effected by use of a refined sampling technique. Such surveys are often employed in those industries the extent of which is not fully determined. In these instances, the mail questionnaire is a useful device for gaining information as to the actual number of firms. The principal sampling difficulty is created by the nonrespondents. Failure to investigate the nature of the nonrespondents may introduce biases into a mail survey, since in a good many cases, they may not have answered owing to factors allied to wages. The direction and size of such bias cannot be predicted, and hence some personal visits are generally required in mail questionnaire surveys.

In personal visit surveys, careful design is necessary in establishment sampling since the cost per schedule obtained is rather high. The object of any sampling procedure employed is to secure the desired accuracy with a minimum expenditure. Field representative visits to unwiseley selected establishments adversely affect the accuracy of a survey relative to its cost.

General Sampling Procedures

Some general rules apply to the sampling and collection of wage data, by field agent visit, as done by the Bureau of Labor Statistics.

(1) All visits are made according to some fixed rule. If the plant is assigned, it must be visited, and a disposition made; a schedule must be obtained unless the firm is outside the scope of the survey, or out of business. An agent is given no discretionary powers as to which particular firms are to be visited. Ease of obtaining a schedule does not influence the choice of individual firms for study. Every reasonable effort is made to get a schedule, once a firm is assigned. All firms within the scope of the particular survey are included in the industry population from which the sample is drawn.

(2) Personal judgment as to what constitutes representative firms is not relied upon. The system of sampling employed is unbiased, i. e., there is no reason to expect that any characteristic of a given sample would be more likely to be greater than to be less than the results from a complete census. The procedure, if repeated over all pos-

sible samples of the same size, would give the same results as a census. In addition, the procedure is such that if successive samples were taken, all possible samples would occur with approximately equal frequency.

(3) The system employed makes possible some appraisal of the sampling error of the results. Only then can it be determined objectively whether the sample should be increased in the interest of accuracy or decreased in the interest of economy.

Determination of Industry Population. In general, the industry population is completely determined before sampling is begun. That is, a list of firms is assembled in some form, and, insofar as possible, grouped according to such pertinent characteristics as are known, i. e., product, location, etc.

Sources used for this purpose include listings provided by the various State departments of labor or unemployment compensation bureaus, trade directories, lists provided by trade associations, unions, or regulatory government agencies. If these lists are used in combination, care is taken to eliminate duplication.

The size of the industry population may be adjusted as the result of the field work, if it is found that a certain proportion of the firms assigned should not be covered, i. e., are out of business or engaged in a type of business not covered in the survey. The estimated total population is adjusted in accordance with the findings in the sample study.

In some cases a preliminary sample study, or even a census, may be made of an industry in order to obtain essential data on various characteristics of establishments for use in the classification of the population. No wage data are obtained in such a preliminary survey.

Size Limits. A restriction is usually placed upon the minimum size of firms to be studied. Depending on the industry and the distribution of total employment by size of plant, lower limits range from 5 employees in auto repair shops to 250 in airframe manufacturing. Otherwise, it would be necessary to expand greatly both the list of firms from which the sample is drawn and the sample studied. In addition, the sampling error of the results would be greater than that which is found when the minimum size of firm studied is

limited. Another reason for such limitations is that the surveys deal primarily with occupational wages, and the smaller firms frequently do not provide the occupational specialization of duties that is necessary to define an occupation clearly. Exclusion of the smallest size firms is not likely to have a very great net effect on the average wage levels. The differences in over-all averages caused by such exclusions have, in every case investigated, been less than the sampling error normally expected.

After establishing the minimum size for survey, every effort is made to insure that the results represent an unbiased estimate of the segment of an industry actually studied. Thus, firms of all sizes studied have a chance of being included in the survey. They are not necessarily all represented in the same proportion, but the disproportion is adjusted by the assignment of proper weights (see p. 416).

Approximate Sample Size Needed. No advance judgment is possible to determine a sample size uniformly sufficient for all purposes. For instance, if the workers in one of the occupations studied, such as maintenance electricians, were paid almost uniform rates throughout a city, a sample of very few establishments would suffice. But the same size sample would be clearly deficient for any occupation in which rates varied considerably from plant to plant. A small sample might be sufficient for determining the average rate for jobs that are found in every establishment, but inadequate for an uncommon job. Therefore, some occupation or characteristic must be selected that can be measured with the desired degree of accuracy, and about which the sample size can be developed. Some items will be measured more and others less accurately. The particular research worker's knowledge of what is important in the given industry is indispensable, and there is no purely statistical substitute for it.

If break-downs of the data by some characteristic are sought, sufficiently large samples must be provided for each subgroup. For instance, in the women's dress industry, data are customarily shown for the so-called contract shops and inside shops separately. These are considered separately and the appropriate sample size is chosen for each. In such cases, the accuracy of the data for the combined group is greater than it would be if the

total sample were planned to show the combined group as a unit.

After selection of the items used as the standard of accuracy, a determination is made of the approximate sample size needed to yield estimates of such items, within the specified degree of accuracy. The following information is employed for this purpose.

(1) Number of establishments in the particular industry.

(2) An estimate of the coefficient of variation of the item being measured.² Here, the results of any previous surveys of the same industry are most helpful. If such information is lacking, the coefficient must be estimated from other surveys of a similar nature, or (lacking such data) from experience in a related field.

Knowing these two quantities, it is possible to arrive at the approximate sample size by the usual formula for the sampling error of the means of a finite population.

The usual formula for the sampling error of the mean—

$$(1) S(M) = \frac{S(X)}{\sqrt{n}}$$

where $S(M)$ is the sampling (standard) error of the mean, M , $S(X)$ is the standard deviation of the population averages (estimated from the sample, as a rule, though not necessarily), and n is the sample size in terms of establishments—should be modified in this case to allow for the fact that in occupational wage surveys the sampling is done without replacements from moderately small populations. Instead of (1) write

$$S(M) = \sqrt{\frac{N-n}{N-1}} \frac{S(X)}{\sqrt{n}}$$

where $S(M)$, $S(X)$, and n are the same as above and N is the size of the finite population (in terms of establishments).

Since the distribution of plant averages is approximately normal, it may be assumed with

² The coefficient of variation as used here is the ratio of the standard deviation of establishment averages to the average of all establishment averages. Although wage levels themselves were increased, the relative dispersion of wages from plant to plant appears to remain relatively stationary for short periods. In recent years, the practice of granting general wage increases in cents-per-hour has caused slight shrinkage of the relative variation between establishments so that some slight overestimate of the coefficient of variation results from use of previous data.

safety that two-thirds of all averages, based on samples of size n , will lie within the range $M \pm S$ (M), or that 95 percent will lie within the range $M \pm 2S$ (M). Therefore, it is necessary to solve the equation

$$S(M) = K \sqrt{\frac{N-n}{N-1}} \frac{S(X)}{\sqrt{n}}$$

where K is a factor depending on the degree of confidence with which it is expected that the sample mean falls in the allowed range.

Since it is sought to obtain the relative error and not the absolute error, division by the mean M , yields

$$\text{Percent of error} = K \sqrt{\frac{N-n}{N-1}} \frac{V}{\sqrt{n}}$$

where V is the coefficient of variation.

Solving for n , the sample size, yields

$$n = \frac{N}{(PE)^2 \frac{(N-1)}{K^2 V^2} + 1}$$

PE —is the permitted percentage of error

N —number of establishments in the population

V —coefficient of variation of item studied

K —number of standard errors on either side of mean needed to determine the desired confidence interval. (2 if the sample mean should differ from population mean by no more than the permitted error in fewer than 5 cases out of a hundred, 1.645 if sample mean should differ from population mean by no more than the permitted error in no more than 10 cases out of a hundred.) The appropriate value of K can be found in the tables of the normal curve for other situations.

Tables corresponding to the various values of population sizes and coefficients of variation can be computed in advance.

Stratification Procedures. The preceding discussion on sample sizes is based on the assumption that the data presented are the sample average of establishment averages. However, in actual practice it is more usual to publish, not the average of plant averages, but the average for the individual workers in the occupation, i. e., the average published is the weighted average of the individual earnings, not simply an average of the individual establishment averages. For instance, if the

averages for tool and die makers in three of the sampled establishments are as follows:

	Number of tool and die makers	Hourly earnings
Establishment 1.....	4	\$1.50
Establishment 2.....	5	1.80
Establishment 3.....	1	1.20

The weighted average hourly earnings derived from this sample is:

$$\frac{(4 \times 1.50) + (5 \times 1.80) + (1 \times 1.20)}{4 + 5 + 1} = \$1.62$$

The relatively large variation from plant to plant in the number of workers in an occupation means that the sampling problem is complicated by two quantities, each of which is subject to sampling error—the plant averages themselves and the number of workers involved. In order to reduce the effect of the latter element on the sampling error of the weighted mean, the sampling must be done, not at random from the whole population but from a series of subdivisions, or strata, in which plants of approximately the same size classifications are grouped.

After deciding on sample size, allocation of the sample to the various size strata follows. This allocation should be as efficient as possible, i. e., it should yield a smaller sampling error than any other allocations of a sample of the same size.³

The way to achieve the most efficient distribution, or optimum allocation, of the sample to the various size strata has been determined to be by the assignment of schedules in proportion to the total employment in the strata. For example, if a size stratum has 20 percent of the employment of the industry, 20 percent of the sample should be taken from that stratum. Strictly, the number taken should be jointly proportional to the total employment and the standard deviation of average earnings within each size stratum. However, little evidence exists to show that these standard deviations differ sufficiently from size group to size group to merit the additional labor of considering them as other than equal.

It may appear that the preliminary sample size could be computed by solving the equation for the

³ No reference to the relative cost of the collection of large schedules and of small or medium-sized schedules has been made up to this point. Considering the large proportion of overhead (travel time, and time necessary to see the official giving the information), the method outlined herein has also been found the most efficient from the standpoint of total cost. Only in the largest firms has it been found worthwhile to resort to intraplant sampling.

sampling error of the mean of a stratified sample selected according to the principle of optimum allocation. Actually, this is scarcely ever possible in occupational wage surveys because the distribution of plants by size is such that the number of largest plants demanded under this theory is generally larger than the number that actually exist in the entire population.

In order to compute the sampling error of the estimated mean, the actual number of schedules selected in the formula may be substituted for the error of the mean of a stratified sample. If the plant distribution by size is such that the error appears considerably smaller than desirable, the sample size may then be reduced. In general no modification is necessary except in those cases where several comparatively large firms account for a high proportion of the total employment in the area. Often, some slight enlargement of sample size is made to compensate for the irregular frequency of occurrence of fairly important occupations.

Peculiar problems of occupational structure occur in some industries. For instance, in the cotton textile industry, the industry is quite generally divided into integrated mills (those spinning yarn and weaving) and yarn mills (those spinning alone) in some areas. The spinning mills contribute no information regarding the wages of weavers, and, therefore, the two groups must be considered as separate populations in selecting samples.

In a good many cases, it is possible to perform further stratification of establishments if information is available regarding such characteristics as unionization, type of products, etc. In cases of this kind, it is often possible to classify the establishments by such characteristics within each size group and to set up small cells and to select one or more sample members from these cells. Currently, little is known as to the reduction of sampling error by such procedures. Very often such information is not available, and no further stratification is possible, and attempts to use fragmentary information may result in an unknown bias.

Regardless of stratification methods, once the cells have been established, the selection of the plants actually studied is purely random. This is true even though personal judgment is used in determining the make-up of the cells themselves.

Estimation From the Sample. When the method of optimum allocation is used, the sample generally consists of all very large firms, a large proportion of the next size group, a smaller proportion of the next, and so on. Obviously, straight addition of the data for all of these establishments would yield a bias toward the large firms. Therefore, smaller firms are assigned weights that are the inverse of the sampling ratio for the stratum from which they are chosen, e. g., if a third of the plants are selected from a cell, they are all given a weight of 3. By use of punch-card methods, the computation of individual strata averages is avoided, and the estimated total workers and aggregate earnings for all strata combined are computed simultaneously.

To illustrate the use of weights, suppose that establishment 1 was drawn from a cell in which half the plants were used in a sample. It is therefore given a weight of 2. Establishment 2, on the other hand, was taken with certainty, i. e., it stood in a class by itself, and is given a weight of 1. Establishment 3 was taken from a cell where a fourth of all plants were used in the sample, and hence is given a weight of 4. The calculations are, therefore:

	Total weighted earnings	Total weighted workers
Establishment 1.....	$2 \times 4 \times 1.50$	2×4
Establishment 2.....	$1 \times 5 \times 1.80$	1×5
Establishment 3.....	$4 \times 1 \times 1.20$	4×1
Estimated universe....	25.80	17

The estimated average hourly earnings in this case is $\frac{\$25.80}{17} = \1.52 .

Limitations of Sampling Theory

Difficulties are encountered in attempting to calculate rigorously the sampling error of weighted averages of the type published by the Bureau of Labor Statistics in its occupational wage studies. These averages are strictly the ratio of two random and highly correlated variables, the total earnings and number of workers, information on whose exact distribution is not available in its entirety. Under favorable conditions, the sampling error of such ratios can be approximated but this cannot be done too well if the relative variation of the

denominators (number of workers) is large, as is often the case. The necessary computations are also quite expensive.

Experimental work indicates that the relative sampling error of the average of plant averages (within any size group) is not materially different from that of the weighted average. By insuring inclusion of all large plants, the sampling error of the over-all average of any given item is likely to be reasonable, especially for specialized occupations likely to be found in large establishments.

The assumption that the optimum sample design for one item is also optimum for others may not be strictly sound. But it is necessary to work with only one sample for all purposes. In any event, wages and wage practices are highly correlated, and departures from optimum design cannot be too great in most cases (i. e., number of workers receiving specified types of vacation privileges). Samples of the design used are also reasonably efficient for estimating the total employment in the industry being studied, as well as the total number of workers in specific occupations.

Illustrative Example. An illustration is the selection of a sample for the power laundry industry in a large city, where there were 150 establishments of more than 20 workers. According to a previous survey, the average coefficient of variation for this industry in this city was approximately 1 to 5, corresponding to a sample size of

about 30. In the total population, the employment and firms were distributed as follows:

Number employed	Plants	Workers
251 and over.....	2	700
101-250.....	42	6,300
51-100.....	63	4,600
21-50.....	43	1,400
Total.....	150	13,000

Hence, the final sample would be distributed as follows:

$$\frac{700}{13000} \times 30 = 1.6 \text{ from the largest size group}$$

$$\frac{6300}{13000} \times 30 = 14.5 \text{ from the second group}$$

$$\frac{4600}{13000} \times 30 = 10.6 \text{ from the third group}$$

$$\frac{1400}{13000} \times 30 = 3.2 \text{ from the fourth group}$$

In actual practice, since a whole number of firms must be taken, the final sample consisted of 2 of the largest with a weight of 1; 14 of the next group with a weight of 3; 11 of the next group with a weight of 6; and 4 of the smallest firms with a weight of 11; a total of 31 schedules. The departure from the numbers shown previously was made in order to simplify the weighting procedure.

XIII. Occupational Wages: Conduct of Surveys¹

THE METHODS of making occupational wage surveys² have evolved from long years of experience by the Bureau of Labor Statistics in the collection and analysis of facts relating to the country's wage structure. These surveys are designed to provide the public with wage and related information in a form that emphasizes the major factors that make for differences in wage levels. Typically, wage levels in the United States vary by occupation and industry, and within industry by geographic location, size of establishment, size of community, extent of unionization, and method of wage payment. Much of the planning, sampling procedures, methods of collection, and tabulation are influenced by these factors of variability.

Four types of wage surveys are currently conducted by the Bureau; each is distinguished by the population unit that is considered in sampling. First, there is the Nation-wide industry survey, in which samples are selected with reference to the industry as a whole. However, these samples are so stratified that regional and locality data are also provided. The second type is the industry-by-area survey. In these studies samples are selected with reference to a particular industry in an area. The third type is the cross-industry study, in which samples are selected with reference to all industries in an area. This type of study is mainly practical in occupations, such as office occupations, that are found in most industries within an area. Fourth, in surveys of professional workers, sampling is carried out with reference to all workers in a profession rather than in any establishments with which they may be associated. Each type of survey yields somewhat different results from the others, but essentially the methods of making the studies, except for the sampling, have certain elements in common.

The comparatively high cost of occupational wage studies makes it impracticable to study all industries annually. In all instances, it is the Bureau's objective to provide occupational wage

data for the leading industries at least every 2 or 3 years, however. Beginning in 1947, annual studies have been made of a group of some 20 industries on an industry-by-area basis for the twofold purpose of providing information more frequently than is usual and for establishing a wage series to portray the movement of wages in these industries. In selecting industries for study in any year, the Bureau is guided by the interest of the public in information as well as by its anticipation of important developments in particular industries.

The wage data considered of primary importance and adopted for occupational studies are straight-time rates, excluding overtime and shift premiums.³ Rates as such can be obtained, however, only for workers paid on a time rate basis. For those workers covered by piece work or other incentive systems of wage payment, a rate of earnings is obtained by dividing earnings, exclusive of overtime and shift premiums, by the total time worked during a pay-roll period. For plant, or production, workers rates are usually obtained on an hourly basis; weekly rates are obtained for office workers; and annual or monthly rates are most frequently measured for professional workers. In general, the surveys attempt to use the measure of wages that is typical in the industry and occupations being studied. In conjunction with the wage rates, the number and sex of the workers is obtained for use in tabulations based on this characteristic.

Supplementing the wage data, information on various related practices is also studied. Among these items are shift premiums, paid holidays, paid vacations, and insurance and pension plans.

The findings of these studies are used extensively in collective bargaining, as well as in private wage determinations. They are also used in making interregional and intercity comparisons of wage rates, in order to facilitate decisions with respect to plant location. In addition, they provide necessary information for the formulation of public policy on wages, as in minimum wage legislation, and for the analysis of trends in economic development.

¹ By Kermit B. Mohn of the Bureau's Division of Wage Statistics.

² This article relates to studies in which data are derived from employer pay-roll records or from individual workers. For a description of surveys based on union records, see note VI in this series, Preparation of Union Scale of Wages and Hours, Monthly Labor Review, November 1949 (p. 545).

³ Straight-time rates more accurately reflect a worker's payment for a uniform unit of work as compared with gross earnings which are affected by the length of time worked.

Limitations of Surveys

The value of successive Bureau occupational wage studies of a particular industry for measuring changes occurring between the survey periods usually has certain limitations, even though the intervals between surveys may be as short as a year. These limitations arise from the fact that, while individual studies are made under the same general procedures, they are designed to meet specific industry and labor needs of the moment in terms of occupational classifications, job descriptions, types of data, and other factors. For example, surveys have been made annually for a number of industries. Consultations with management and labor are held before each study, however, and necessary changes are adopted. For that reason alone, the consecutive studies are not strictly comparable. Although this may be disadvantageous in some respects, the primary purpose of the studies is to indicate wage levels as of a particular time rather than to attempt to portray the movement from one survey period to another.

Study Methods and Sources

In developing plans for the surveys, Bureau consultations are held with industry and labor representatives, through its Business and Labor Advisory Research Committees and directly with management and labor representatives in each industry. Subjects dealt with generally relate to technical matters regarding time of studies, selection of jobs for study, preparation of job descriptions, and kinds of special data needed by those directly interested in the study.

Planning of Surveys. Industry scope in the wage surveys is practically always expressed in terms of the classification system of the Standard Industrial Classification Manual issued by the Bureau of the Budget. Varying according to the particular study, the scope may range from a part of a 4-digit category to a combination of several 3-digit classifications; the basic criterion is that the industry being studied should represent a fairly homogeneous unit insofar as wages and occupations are concerned. In order to increase efficiency in the collection of data, the scope of the industry is usually modified to exclude all establishments with fewer than a specified number of workers. This minimum size limitation is established after a study of

the possible effects this limitation would have on the results. Another practical reason for the adoption of size limitations is the difficulty encountered in classifying workers in the very small establishments where the same degree of specialization found in large plants does not exist.

It is not essential to provide data for all occupations in an industry in order to describe an industry's wage structure. In addition to the increased cost of obtaining occupational data for all occupations in an industry, the usefulness of such data is seriously limited because of the wide differences in occupational structure from plant to plant. In recent years, therefore, a list of key jobs has been selected which represents the total occupational structure ranging from the least- to the highest-skilled workers. In the selection of such jobs, the following criteria have been useful: (1) numerical importance of job, measured by workers in the job; (2) definiteness of occupation; (3) stability of occupation from period to period; (4) prevalence of occupation among establishments; and (5) historical importance of job in establishing wage rates. In addition to these five criteria for selecting individual jobs, the entire list is selected in order to represent the complete range of rates in the wage structure from high to low, since it is assumed that the rates of pay for the key jobs can be used as bench marks for measuring rates of the nonselected jobs by relating the one group to the other.

Each key occupation is carefully defined in order to obtain maximum comparability of jobs from plant to plant. In preparing such definitions, the suggestions of industry and labor representatives are of great value. A job description that is to be used in a survey involving many establishments includes the major determining characteristics of the job. It is flexible enough, however, with respect to minor variations to permit interplant comparisons based primarily on the major elements. Above all, classification of workers is based on job descriptions and not on titles of jobs used in various plants.

Collection of Data. The results obtained from a complete coverage of all establishments in an industry, as compared with those obtained from a carefully selected sample, would not warrant the generally large expenditure involved even if the funds were available. For this reason,

the Bureau's surveys are practically always made on a sample basis.⁴

Data for most of the occupational wage surveys are obtained by personal field visit to each establishment in the sample on forms of the type here reproduced. Experience with these surveys has proved personal visits are necessary in most industries to obtain a high degree of uniformity in the data, especially in the classification of workers by occupation. The field work is administered through the Bureau's five regional offices. Surveys of professional workers require direct reporting from the workers themselves. These, as well as a limited number of industries which have highly standardized occupations, are surveyed by mail questionnaire.

The basic source of information, when establishments are visited, is the pay roll or other company records. In order to classify workers by occupation, discussions are held with company personnel acquainted with job content. In addition, the Bureau representative usually observes the workers on duty. Information on practices related to wages is obtained from the authorized company official.

Compilation Procedures

Individual company reports are forwarded to the respective regional offices of the Bureau which have the primary responsibility for reviewing, editing, and preparing the schedules for tabulation. The schedules are reviewed for reasonableness and

* The sampling procedure is described in the preceding article (p. 412).

B. L. S. 1475
OWR-2
(Rev. 49)

STRICTLY CONFIDENTIAL

Occupational Rates—

Establishment name _____
Pay-roll period from _____ to _____ 19

OASI Earnings Statistics and Their Uses¹

A LARGE VOLUME of statistical information on the earnings patterns and employment characteristics of American workers is collected in administering the old-age and survivors insurance program, by the Bureau of Old-Age and Survivors Insurance, Federal Security Agency. Practically all of it is of a type not available from any other source, and is valuable in studies of a variety of social, economic, actuarial, and administrative problems. This source has already been utilized in dealing with important problems both in and outside government circles, particularly in the social security program, but the full potentials of the BOASI earnings or wage records have not yet been developed. The wage data that are now made available from the old-age and survivors insurance records and their uses and the series which may be developed by further coordination among government, labor, and management are indicated in this article.

Two types of old-age and survivors insurance wage statistics are compiled as illustrated in tables 1-3. Broadly, they are total pay-roll figures for each calendar quarter and year and distributions of workers in covered employments classified by their annual wage and salary amounts. For example, aggregate pay rolls in covered employments amounted to 24.5 billion dollars in the first calendar quarter 1949. The wage size distributions show that 3.1 percent of the covered workers in 1939 had annual earnings of \$3,000 or more in that year as compared with 24.3 percent in 1948. Both the aggregate earnings figures and the distributions of workers by amount of earnings are available for various groups of covered workers, such as men, women, whites, Negroes, and workers in various States, industry groups, and in a number of other classifications.

Aggregate Wage Statistics

Three different kinds² of aggregate wage

¹ By B. J. Mandel of the Bureau of Old-Age and Survivors Insurance, Social Security Administration, Federal Security Agency.

² All three types of aggregate include wages in kind, tips (where reported), bonus payments, and other types of payments subject to social security deductions. They exclude earnings in noncovered employments, such as employment by Federal, State, and local governments, railroads, agriculture, and self-employment. Taxable wages are limited to the first \$3,000 a year

figures (table 1) are available, as follows: (1) Wages which are taxable under the OASI program (known as taxable wages); (2) wages which are creditable to a worker for benefit purposes (known as wage credits); and (3) wages which are paid in covered employments, including taxable as well as non-taxable wages and salaries (known as total covered earnings). Each of these three types of aggregates is significant for different purposes.

Taxable wages are wages from which taxes are deducted. Therefore, time-series on aggregate taxable wages are valuable in administrative planning. For example, they are used in estimating the amount of taxes to be collected under the OASI program, by applying the prevailing tax rate to the taxable pay-roll aggregate.

Data on aggregate wage credits indicate potential OASI benefits of insured workers and their dependents. By obtaining a monthly average of the wage credits accumulated over the individual's working life, it is possible to apply the benefit formula under the OASI program and thus to determine the worker's potential primary benefit. Utilizing these figures, it is also possible to compare potential benefit amounts with total tax contributions and to make actuarial estimates.

Total covered earnings form a basis for measuring the extent of coverage of the OASI program and the additional tax yield under provisions other than the existing \$3,000 provision. In view of the high proportion of coverage, especially in some geographic divisions, they also give a general measure of purchasing power.

Total wage and salary earnings represent the complete pay rolls in covered employments. Consequently, they are useful in the compilation of national income estimates. The OASI aggregates are, in fact, transmitted quarterly to the National Income Division of the Department of Commerce. These aggregates are used each year as the benchmark in the preparation of estimates of total wage and salary payments in industry and commerce. Workers in employments covered by old-age and

a worker receives from a single employer in covered employment. Since many workers are employed by more than one employer in a year, and receive more than \$3,000 from one or more of these employers, taxable wages include some earnings over \$3,000. Wage credits, however, exclude all of a worker's earnings over \$3,000, regardless of the number of his employers, because earnings over \$3,000 a year are not creditable for benefit purposes. Total covered earnings include all wages and salaries in covered employments regardless of the \$3,000 provision. These aggregates are partly estimated by means of special studies and use of State figures on nontaxable pay rolls under unemployment insurance.

survivors insurance received about 102 billion dollars in 1948 (table 1) which constituted nearly 78 percent of all wage and salary payments in the country in that calendar year. Total earnings in covered employment represented over three-fourths of total pay rolls in civilian employment in 1941-48. Owing to the high proportion of total civilian wage and salary earnings in covered employments, the old-age and survivors insurance total earnings aggregates clearly form a solid base for the United States Department of Commerce estimates of civilian pay rolls.

TABLE 1.—Comparison of total annual pay rolls in all civilian employment with three types of pay rolls covered by OASI

Year	Total pay roll in all civilian employment (in millions) ¹	Pay rolls covered by OASI					
		Taxable wages	Wage credits (in millions)	Total earnings	Percent of total civilian pay rolls		
					Taxable wages	Wage credits	Total earnings
1937	\$45,590	\$29,615	\$29,590	\$32,770	65.0	64.9	71.9
1938	42,442	26,502	26,472	29,026	62.4	62.4	68.4
1939	45,347	29,745	29,745	32,222	65.6	65.6	71.1
1940	48,996	32,974	32,789	35,668	67.3	66.9	72.8
1941	59,846	41,846	41,567	45,463	69.9	69.4	76.0
1942	75,557	52,936	52,261	58,219	70.1	69.2	77.1
1943	91,202	62,423	61,416	60,653	68.4	67.3	76.4
1944	96,286	64,426	63,363	73,249	66.9	65.8	76.2
1945	95,075	62,945	61,602	71,560	66.2	64.8	75.3
1946	103,400	69,088	68,109	79,260	66.8	65.8	76.6
1947	118,325	78,372	78,824	92,449	66.2	64.9	78.1
1948	131,373	84,188	82,200	102,385	64.1	62.6	77.9

¹ Estimated by U. S. Department of Commerce.

Wage Size Distributions

The OASI data on earnings distributions show the number of workers and amount of earnings at different levels of annual earnings by calendar years (see table 2 for 1939, 1944, and 1948 statistics). Thus, they are indicators of the American worker's actual earnings in the course of a year in different industries and localities. Moreover, the annual earnings series show the extent of covered employment during the year as measured by "quarters of employment." Generally, the four-quarter workers are regularly employed in covered industry; to a minor extent, some less-than-four-quarter workers are also regularly employed. Classification of wage size distributions by quarters of employment provides a fairly reliable basis for determining the extent of full-year and part-year covered employment in different industries and localities.

Because of the \$3,000 limitation on taxable wages, the regular size distributions show class intervals up to \$3,000 and group all workers with \$3,000 or more in a single interval. By using medians as a basis for comparing average earnings, the problem of the open end earnings class is overcome. Furthermore, when median earnings are above \$3,000, or when distributions above \$3,000 are required, some estimating is necessary.

TABLE 2.—OASI-estimated number and percentage distribution of workers by amount of annual covered earnings, 1939, 1944, and 1948 (for all workers and four-quarter workers)

	Annual covered earnings [wage credits]	Number (in thousands)			Percentage distribution		
		1939	1944	1948	1939	1944	1948
All workers							
\$1-\$499	13,279	14,113	10,500	39.3	30.5	21.3	
\$500-\$999	8,049	6,337	5,900	23.8	13.7	12.0	
\$1,000-\$1,999	9,181	10,930	10,400	27.2	23.6	21.1	
\$2,000-\$2,999	2,185	7,753	10,500	6.5	16.7	21.3	
\$3,000 and over	1,055	7,163	12,000	3.1	15.5	24.3	
Total	33,751	46,296	49,300	100.0	100.0	100.0	
Median	\$716	\$1,223	\$1,800	—	—	—	
Four-quarter workers							
\$1-\$499	2,676	1,246	600	12.5	4.4	2.0	
\$500-\$999	6,651	3,273	2,100	31.1	11.5	6.5	
\$1,000-\$1,999	8,877	9,288	7,800	41.5	32.8	24.1	
\$2,000-\$2,999	2,149	7,442	9,900	10.1	26.3	30.7	
\$3,000 and over	1,023	7,056	11,900	4.8	25.0	36.8	
Total	21,376	28,344	32,300	100.0	100.0	100.0	
Median	\$1,113	\$2,045	\$2,600	—	—	—	

Regular Uses of Series. The annual wage size distributions form a comprehensive statistical background for the analysis of annual earnings. For example, the number and percentage distribution of four-quarter workers in covered employments shown in table 2 indicate that the median wages in covered employment of four-quarter workers increased from \$1,113 in 1939 to \$2,600 in 1948. The reported proportion of four-quarter workers with annual covered earnings of \$3,000 or more rose from 4.8 percent in 1939 to 36.8 percent in 1948.

When classified by industry, this type of information provides facts on the levels and trends in annual earnings, which are useful to both labor and management in many fields of wage analysis. The data have been used in appraising and planning certain phases of the OASI program and, to a smaller extent, in connection with consideration

of private retirement, health, and welfare programs.

An example of levels and trends of annual earnings in industry groups is shown in table 3. It gives the wage distribution of workers in the manufacture of textile-mill products and of food and kindred products for 1945 and 1947. Among other facts, this table shows that from 1945 to 1947 median annual earnings of four-quarter workers in the textile industry increased by 35 percent (or from \$1,501 to \$2,025) as compared with 22 percent for four-quarter workers in food manufacturing (or from \$2,093 to \$2,544).

TABLE 3.—OASI—comparison of annual covered earnings of four-quarter workers in textile and food manufacturing industries, 1945-47.

Annual covered earnings	Percentage distribution of workers by industry					
	Textiles			Food		
	1945	1946	1947	1945	1946	1947
\$1-\$199	0.2	0.1	0.1	0.9	0.4	0.5
\$200-\$399	.8	.5	.2	1.7	.9	.8
\$400-\$599	2.2	1.2	.7	2.6	1.6	1.2
\$600-\$799	4.4	2.2	1.4	3.4	2.1	1.6
\$800-\$999	7.9	4.3	2.7	4.3	3.1	2.5
\$1,000-\$1,199	12.4	6.6	4.1	5.8	4.4	3.0
\$1,200-\$1,399	15.1	10.9	6.3	7.0	5.4	3.9
\$1,400-\$1,599	13.9	13.6	8.7	7.7	7.2	5.1
\$1,600-\$1,799	9.3	13.2	11.3	6.6	7.3	5.8
\$1,800-\$1,999	7.1	10.8	13.2	7.1	7.9	6.4
\$2,000-\$2,199	5.8	7.6	11.1	6.3	7.9	6.8
\$2,200-\$2,399	4.3	6.7	8.8	6.4	7.5	7.0
\$2,400-\$2,599	3.6	5.0	6.5	6.4	7.7	7.3
\$2,600-\$2,799	2.9	4.0	5.6	5.8	6.6	7.2
\$2,800-\$2,999	2.5	3.1	4.1	5.5	5.3	6.8
\$3,000 and over	2.6	10.3	15.2	22.5	24.8	34.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median	\$1,501	\$1,762	\$2,025	\$2,093	\$2,249	\$2,544

Classification by age of the workers provides a variety of facts on age and earnings in industry. One user of the age-industry wage distribution data from the OASI records is the Division of Child Labor and Youth Employment of the Bureau of Labor Standards, United States Department of Labor. There appears to be no better, more comprehensive, and readily available series on the number of wage earners under the age of 18 years in industry and commerce than the regular OASI annual tabulations.

Much has been said about the problems of older workers in industry. The OASI age tabulations provide statistics on the wage levels and earnings patterns of older workers in comparison with middle aged and young workers.³ For example,

³ See The Older Worker, Old-Age and Survivors Insurance Program Analysis Report 3, April 1949, Federal Security Agency, Social Security Administration, Bureau of Old-Age and Survivors Insurance.

data for 1947 indicate that young workers under age 20 had median covered earnings of \$354 as compared with \$2,130 for workers in age group 45-59 and \$1,566 for those aged 65 years and over.

Data on the number and proportion of women in covered employments and their wage size distributions as well as other characteristics have been tabulated for a number of years through 1948. They show regularly the industries which predominantly employ women, the age distribution of women workers, and their earnings as compared with those for men. From these records, a special tabulation of figures covering workers in the laundry industry was made for the Women's Bureau, U. S. Department of Labor. Thus, data were provided on the number of quarters of employment, amount of annual earnings, and age of women and men in the industry.

Special Uses of Series. The BOASI is not always informed of the specific applications that are made of its data. But a few of these special uses have been recorded in correspondence with other agencies. For example, data on the industrial and employer mobility of steel and automobile workers were provided for studies of industry retirement plans. Data on workers aged 65 years and over with earnings under \$500 and under a \$1,000 a year were provided to the Treasury Department for planning the special tax provision for older workers, whereby those aged 65 and over were taxed only on earnings over a \$1,000 a year (currently \$1,200 a year) rather than over \$500 (currently \$600) as is the case for wage earners under that age. Data on Negro workers and their annual earnings by industry have been supplied to the U. S. Fair Employment Practices Committee. They provided background information on the extent of Negro employment in industry and the annual earnings of these workers. Key statistics in planning the compulsory military training program were provided to the President's Commission on Military Training on the number of male workers under age 25 and the amount of their annual earnings.

Sources of Annual Data

Information from three basic reporting forms is combined to obtain the data on annual earnings here summarized.

(1) A reporting form, known as the application for an account number (Form SS-5) is filed by the employee. Every worker must complete this form when entering covered employment, so that his wage record may be permanently identified. The principal statistical items which thus become available are age, sex, and color. Applications for account numbers were first made in November 1936, and by the end of 1936, over 17 million numbers had been assigned. A year later, the gross total issued had risen to 37 million and by the end of 1949 to 95 million. Not all of those who have numbers have wage credits under the program. By adjusting for deaths, multiple numbers, and those without wage postings, an estimated total of 80.4 million living persons had credits as of January 1, 1950. Currently, about 2.5 to 3.0 million new numbers are issued annually.

(2) A basic form is also filed by employers. It consists of an application for an identification number, from which the main statistical items drawn are geographic location and nature of business (industry) of the company and/or each establishment. When the social security program was inaugurated in January 1937, about 2 million employers in commerce and industry employing one or more workers had already been assigned numbers, to identify them and their quarterly tax reports. Each subsequent day, new employers, as well as old employers, previously not registered under the program, were issued numbers. By the end of 1949, more than 7.7 million employer numbers had been issued. Allowing for discontinuance in operation, actually about 2.7 million active businesses report taxable wages each quarter currently.

(3) A detailed wage report is filed each quarter (the quarterly tax return) by the employer who is liable under the Federal Insurance Contributions Act. It shows for each individual employee, his account number, name, taxable wages paid during the quarter, and State of employment.⁴ (The 2.7 million employers who filed returns for the first quarter 1949 reported taxable wages of about 23.5 billion dollars for 38.8 million workers in the quarter.) By combining the wage information reported for a worker for the first, second, third, and fourth calendar quarters, wage totals

representing calendar-year earnings are obtained.

Furthermore, by combining the information obtained from the basic employee and employer reporting forms with the quarterly and annual wages, information is obtained on the annual earnings of each employee, age, sex, color, geographic location, industry, calendar quarters of employment, number of employers, number of industries, and number of geographic locations. Most of the foregoing items of information are entered on punch-cards, one for each worker, thus making it possible, with relatively little extra cost, to tabulate statistical information on the number and characteristics of employees under the program by any combination of informational items required to serve specific uses. However, because of cost considerations, tabulations are made on the basis of a sample of workers selected at random by means of digits in the social security account number. In current years, sample sizes have varied from 1 to 3 percent of the total number of workers (or from 500,000 to 1,500,000 workers).

Development of Statistics for Additional Uses

The wage statistics for covered employments, based on employer pay-roll reports, are generally considered highly accurate, sensitive, and reliable. The completeness of the data is enhanced because (1) the figures are derived from reports under a taxing program enforced by law, and (2) many workers check on their wage records to make sure that their full wage credits are reported and recorded (since eligibility for and the amount of OASI benefits depend on reported wage amounts). In addition, practically all workers in industry and commerce and over three-fourths of all civilian wages and salaries are covered by the OASI wage statistics. Nevertheless, the usefulness of the data may be increased further and additional needs that have come to the attention of the BOASI may be met.

A significant limitation is the lack of currency of the OASI wage series. For example, the 1947 annual wage size distributions were not available until the third quarter of 1949—a lag of about a year and a half. Lag can be partly or largely met and overcome (at somewhat higher cost) by obtaining selected data at an earlier stage in the accounting operations than is currently done.

⁴ Other information, such as aggregate taxable wages for the quarter and employment in a given pay period and during the quarter, is also reported, but is not used directly in compiling the annual wage data described above.

Such "advance sample" tabulations are made quarterly by the BOASI for its own administrative uses, and they can be improved to provide more current wage size distributions for other uses.

Improvement is also needed in the data for workers who receive wages in both covered and noncovered employments. Estimates indicate that about 10 to 15 percent of the workers in covered employment in a year also receive earnings from some noncovered jobs, such as railroad employment, government, or domestic service. If information were obtained for these workers on their noncovered earnings, it could be used in conjunction with OASI wage-credit statistics to provide total annual earnings (both covered and noncovered) of individuals in covered employments. In order to overcome this problem partly or wholly, the OASI sample of wage records could be coordinated with those of the Railroad Retirement Board, Civil Service Commission, and State and local governments; special surveys could be made of individuals in covered as well as non-covered employments; or the OASI sample could be coordinated with Census Bureau annual income and wage surveys.⁵

OASI data being for individual workers only, do not reflect family wage levels. Therefore, their utility in earnings analyses would be enhanced by a special survey or surveys to obtain information on the family relationship of individual covered workers. In this way, annual earnings in covered employment could be combined with earnings of other members of the family unit in order to obtain annual wage statistics for families.

A large proportion of World War II veterans are in covered employments but they are not identifiable in the OASI wage tabulations. If such identity could be established through cooperation with the Veterans' Administration, it would be possible to tabulate, on a continuing basis, statistics on the levels of covered earnings, indus-

trial and geographic distributions, and other characteristics of veterans of World War II.

The greatest geographic detail published in the old-age and survivors insurance annual wage series has been by State. Recently, however, tabulations, which provide annual wage data, cross-classified by metropolitan and nonmetropolitan areas of employment for Ohio and Michigan, have been prepared in connection with a pilot study on labor mobility. Compilation of these local area wage data entailed relatively little extra cost, owing to the designation of the county location as well as the State in the geographic codes used on the basic punch cards. (An analysis of these data is expected to be released in several months.) Similar studies can be made for other local areas in other States.

Similarly, the regular OASI wage tabulations have been limited to major industry groups (largely the first two digits in the industry code), such as food and kindred products, textile mills and their products, etc. However, annual wage data for detailed industries can be compiled, because the industrial code entered in the basic punch cards provides more detailed information than is currently tabulated, such as, for meat packing, condensed and evaporated milk, full-fashioned hosiery mills, etc.

No comprehensive tabulations have been prepared on annual wage patterns of workers from year to year. A person's wage pattern over his working lifetime could be obtained, using the OASI continuous work history sample of covered workers which contains information on annual earnings over a period of time.⁶ This would reveal how a worker's annual wage pattern develops and fluctuates from the year of first covered employment to the last. Classification by industry would yield information on the lifetime earnings capacity of workers as it is affected by industrial attachment, economic conditions, and other changes in the Nation's economy.

⁵ See Coordination of Old-Age and Survivors Insurance Wage Data with Those from Other Sources, by B. J. Mandel, for the Conference on Research in Income and Wealth, National Bureau of Economic Research, New York, April 1949.

⁶ For an explanation of the Continuous Work History Sample, see The Continuous Work History Sample Under OASI, by J. Perlman and B. Mandel, February 1944 Social Security Bulletin.

Recent Decisions of Interest to Labor¹

Wages and Hours²

Home Workers as "Employees." A Federal district court³ held that home workers who sent their products in to an employer without solicitation, in the hope that he would accept them, were "employees" within the coverage of the Fair Labor Standards Act.

Home workers were employed by an employer prior to the effective date of the Fair Labor Standards Act. When the act became effective, they were told that it was no longer possible for him to employ them. Some of these workers, however, continued to send in knitted infants' wear to the employer, either at his invitation or on their own initiative. The products were made from the home workers' own yarn, for which they paid. They also paid the parcel post charges for shipping the products to the employer. The employer rejected about two-thirds of the parcels sent in. He never supplied them with a design, but at times made suggestions as to how the design or materials could be improved. The number of home workers fluctuated.

The Wage and Hour Administrator sought to enjoin the employer from violating the Fair Labor Standards Act with respect to these home workers. The employer contended that they were independent contractors.

¹ Prepared in the U. S. Department of Labor, Office of the Solicitor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached, based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

² This section is intended merely as a digest of some recent decisions involving the Fair Labor Standards Act and the Portal-to-Portal Act. It is not to be construed and may not be relied upon as an interpretation of these acts by the Administrator of the Wage and Hour Division or any agency of the Department of Labor.

³ *McComb v. Wagner Co.* (U. S. D. C., E. D. N. Y., Jan. 25, 1950).

The court granted the injunction. It held that the home workers had been suffered or permitted to work and were thus employees within the meaning of the act. It pointed out that the goods furnished by them constituted an integral part of the employer's business; that the home workers' investment in materials was very small; that the home workers took little risk; and, that sound management on their part had little to do with their profit or loss. The fact that the employer did not supervise the work was held no more controlling than in the case of other home workers whose tasks were not specially skilled. The lack of solicitation by the employer or of any contractual obligation of the home workers to furnish the goods, was held not to make them independent contractors. Although the employer had the right to reject the goods, this right had to be considered in relation to the fact that he would have no business if he rejected them all. Likewise, his power to determine the price was dependent upon his setting the prices high enough to induce home workers to continue supplying him. That no particular design was required was immaterial, the court said, as there were only three major designs for such products.

Enforcement—Employer's Interrogatories. In injunction proceedings against FLSA violations, the Wage and Hour Administrator was held⁴ entitled to refuse to answer an employer's questions as to the source of his information concerning the alleged violations. A district court stated that such evidence was not relevant to the issue of guilt. To insist on its production would hamper the enforcement of the act, since investigations many times required that a confidential relationship be established between investigators and informants. Individuals often would not reveal their knowledge unless their identity remained undisclosed.

Labor Relations

Representations and Elections. A number of National Labor Relations Board rulings interpret the representation provisions of the National Labor Relations Act as amended by the Labor Management Relations (Taft-Hartley) Act, 1947.

⁴ *McComb v. Bond Brothers, Inc.* (U. S. D. C., W. D. Ky., Jan. 30, 1950).

(1) The Board ruled⁵ that a representation election should be held, although a contract between the employer and a rival union still had 3 months to run.

The employer, General Motors, had a bargaining contract dated May 29, 1948, with United Electrical Radio and Machine Workers of America. This contract covered all the units for which UE was certified. On November 2, 1949, UE was expelled from the CIO and the International Union of Electrical Workers was granted a CIO charter. Within a few days, special membership meetings were held among UE local unions in the employer's plants, at which the employees in each instance voted overwhelmingly to disaffiliate from UE and affiliate with the International Union of Electrical Workers. These locals, on application, received IUE charters. They handled local grievances. The UE locals continued in existence, but were inactive. The IUE locals petitioned for representation as bargaining agents. The UE contended that the contract with the employer constituted a bar to representation proceedings.

The Board held to the contrary. Chairman Herzog was of the opinion that the serious doubt as to the present identity of the labor organization which the employees wished to represent them could best be solved by holding an election. Members Houston and Murdock thought it unnecessary to decide that question, but that the contract was not a bar, since it would expire in 3 months.

(2) A union's representation petition was held⁶ to have been timely, although it was not filed until 6 months after the union had notified the employer that it represented a majority of his employees. The employer had in the meantime made a contract with a rival union.

The Board held its rule that a "bare" claim of representation must be followed by a petition within 10 days was not applicable in this case, since the union had submitted definite proof of its majority status early in the negotiations by submitting employee membership cards at a conference. No evidence was shown that the employer had ever questioned the union's claim of a majority. The Board also pointed out that the employer had negotiated with the union as to substantive contract terms both before and after entry into a contract with the rival union. The

fact that the petitioning union was not an "incumbent" union—one previously recognized by the employer—was held to be immaterial, since the union's majority status was not questioned.

(3) A collective-bargaining contract was held⁷ by the Board to be a bar to representation proceedings within 12 months from its adoption, although it contained a union-security clause not ratified by a majority of the employees in a union-shop authorization election. The contract made the union-security clause effective "only if and when effective in accordance with provisions of Federal law." The Board's rule that the inclusion of an invalid union-security clause in a union contract prevented the contract from being a bar to representation proceedings was held not applicable in this case. As in a previous case,⁸ the contract made it clear that the union-security clause would take effect only when its validity was established by law.

Commerce. The NLRB held⁹ that the policies of the amended NLRA would be effectuated by asserting jurisdiction over a chain of 28 local restaurants located in several States. The restaurants were operated largely from the central office as a highly integrated interstate chain, although only a small percentage of their purchases were made in other States. The local managers had very little control over even the method of execution of policy. Employee working conditions and labor relations policies were fixed at the central office.

Interference. The Court of Appeals for the Fifth Circuit, enforcing an NLRB order, held¹⁰ that an arbitrary discharge of a group of employees was an interference with the right of concerted activities guaranteed by section 8 (a) (1) of the amended NLRA. It was, therefore, an unfair labor practice.

These workers had gathered together with a supervisor to discuss a wage increase. At the meeting they pressed for the increase, which the supervisor told them could not be granted because of a pending representation election. When the employees continued to deliberate, the supervisor told them they could quit, or stay on and wait for developments after the election. When

⁵ *In re General Motors Corp.* (88 NLRB No. 112, Feb. 1, 1950).

⁶ *In re Wyckoff Steel Co.* (86 NLRB No. 152).

⁷ *In re Childs Co.* (85 NLRB No. 139, Feb. 15, 1950).

⁸ *Gullett Gin Co., Inc. v. NLRB* (U. S. C. A. (4th), Jan. 30, 1950).

they made no answer to this, but did not disperse, the supervisor told them they were fired.

The court held that, while a discharge for other than union activity was ordinarily not unlawful, this rule was qualified by the provisions of section 7 protecting "concerted" activity. The negotiation engaged in by these employees was held to constitute concerted activity.

Discrimination by Employer. (1) The NLRB ruled¹¹ that an employer was guilty of discrimination in violation of section 8 (a) (3) of the amended NLRA in granting retroactive wage increases to only those employees who were union members. The Board pointed out that, while conditioning of employment upon union membership was permitted under certain circumstances, disparate wage treatment between union and nonunion men was not permitted. The existence of a contract with the union to pay increases to union members did not prevent the employer from paying similar increases to nonunion men.

(2) The NLRB held¹² that an employer was justified in refusing to rehire an employee when work became available on the ground that the employee, while distributing union literature, had called a supervisor a "Fascist" or "Fascist lover." The Board distinguished between cases of insults hurled from a picket line or at a bargaining conference, which had been held no justification for discharge. Such occasions were held not to require such a high standard of etiquette as the instant case.

Refusal to Bargain—Employer. The NLRB held¹³ that an employer "refused to bargain" by offering to hire replacements during a strike at a wage rate higher than that previously offered to the union. While the employer was admittedly privileged to hire replacements in an economic strike, he was held obligated to exercise this privilege in such a fashion that he was guilty of no act denounced by the statute.

The strike, which had started as an economic one caused by failure to agree over wage rates, was converted by the employer's unfair labor practice into an unfair-labor-practice strike. Thus, his refusal to reinstate strikers was held to be discriminatory.

¹¹ *In re Reliable Newspaper Delivery, Inc.* (88 NLRB No. 135, Feb. 15, 1950).

¹² *In re E. A. Laboratories* (88 NLRB No. 140, Feb. 15, 1950).

¹³ *In re Pacific Gamble-Robinson Co.* (88 NLRB No. 100, Feb. 3, 1950).

Refusal to Bargain—Union. The Federal District Court for the District of Columbia held¹⁴ that there were reasonable grounds to believe that United Mine Workers had committed unfair labor practices in violation of sections 8 (b) (2) and 8 (b) (3) of the amended NLRA. The NLRB Regional Director was held entitled to a temporary injunction against such practices pursuant to section 10 (j) of the act.

The union was found to have insisted in its negotiation with employers for a new contract, (1) on a closed-shop clause, (2) on limitation of welfare-fund benefits to union members, and (3) on "able and willing" and "memorial period" clauses. The court also found the union had refused to accede to the request of Southern Coal Producers Association for further bargaining conferences.

The first two practices were held to violate provisions of the act prohibiting a union from attempting to cause employers to discriminate against nonunion workers. The insistence upon such illegal provisions of a contract also was held to constitute a refusal to bargain in good faith with the employers.

Likewise, the insistence on clauses providing for work only when the miners were "able and willing" to work and for work stoppages during "memorial periods" were held to constitute an illegal refusal to bargain. These clauses as interpreted by the union's president, John L. Lewis, had been a means for circumventing the provisions of section 8 (d) (4) of the amended NLRA. That section prohibits either party to a collective bargaining agreement from participation in a strike or lock-out until 60 days after it has given notice of termination or modification of the contract, or until the expiration of the contract, if later. To insist on such illegal provisions, the court stated, showed a lack of willingness to bargain in good faith. The union's refusal to negotiate with Southern operators was held to be a direct violation of its duty to bargain.

While recognizing that the issuance of an injunction would not necessarily make for rapid negotiation of an agreement, the court held such relief to be appropriate, on the ground that it would tend to force concentration on the true differences between the parties.

¹⁴ *Pennello v. Internat. Union, United Mine Workers of America* (U. S. D. C., Feb. 9, 1950).

Secondary Boycotts. A Federal district court held¹³ that a union had not violated the secondary-boycott prohibition of the amended NLRA by inducing supervisory employees of a secondary employer not to handle goods being transported in a box owned by a "struck" employer. The court pointed out that section 8 (b) (4) (A) prohibited inducement and encouragement only of "employees." Supervisors were expressly excluded from the act's definition of employees.

The court refused to grant the petition of the NLRB Regional Director for a temporary injunction under section 10 (j) of the amended NLRA, since there was no reasonable cause to believe that the union had violated the secondary-boycott provisions.

The fact that the union's agent had told an employee not to handle the box until he (the agent) had a talk with the supervisor was held not to show that the agent had induced "employees" to strike or boycott. The provisions of section 8 (b) (4) (A) were held to refer to "concerted" action of employees, of which there was no evidence, whatever threat the union agent may have made of later action constituting a violation of the act.

Individual Rights Under Union Contract. A Federal court of appeals held¹⁴ that an employee was not entitled to damages for an employer's breach of a contract with a company union, when the NLRB had ordered the employer to cease recognizing the union or giving effect to the agreement.

The employee sued the employer for refusing to reemploy him after he had suffered an injury, on the ground that such refusal was a breach of a seniority clause of the plant agreement. He admitted the Board's power to deprive the employer of advantages under this agreement, but claimed that the rights still accrued to employees under the agreement.

The court of appeals, affirming the trial court's decision, held that the employee's rights did not survive the nullification of the agreement, since its terms were not incorporated into the employee's individual contract of employment.

¹³ *Humphrey v. Local 294, International Brotherhood of Teamsters* (U. S. D. C., N. D. N. Y., Jan. 11, 1950).

¹⁴ *Cardenas v. Wilson & Co.* (U. S. C. A. (10th)), Feb. 17, 1950.

NLRB Hearings in Jurisdictional Disputes. The Court of Appeals for the District of Columbia held¹⁵ that the NLRB did not have to hear every complaint of unfair labor practices in jurisdictional disputes, if a preliminary investigation disclosed no reasonable basis for such a complaint. The court reversed a district court decision holding that the Board was compelled by section 10 (k) of the amended NLRA to hear all such complaints.

Section 10 (k) provides that whenever it is charged that any person has engaged in an unfair labor practice within section 8 (b) (4) (D), prohibiting forced work assignments in jurisdictional disputes, the Board is empowered and directed to hear and determine the dispute out of which such unfair labor practice has arisen. This provision applies unless satisfactory evidence of adjustment of such dispute is given the Board within 10 days after receipt of notice of such charge.

The district court, denying the Board's motion to dismiss a union's action to compel the Board to hear a jurisdictional dispute, had held that the words "empowered and directed" in section 10 (k) compelled a full hearing of all such complaints. (Several thousand had been filed since the effective date of the LMRA of 1947.)

The court of appeals, however, held that this provision required a hearing only when there was reasonable basis for a complaint and when an actual dispute existed, and not in cases of frivolous charges with no basis or justification. In other unfair-labor-practice proceedings under section 10, it was pointed out, the Board and its General Counsel were entitled to make preliminary investigations before commencing substantive proceedings. The fact that the language of section 10 (k) was different from that of section 10 (b), under which the Board's power to issue complaints in other unfair-labor-practice cases was permissive, was held not to prevent an investigation under 10 (k). Section 11, the court pointed out, authorized the Board to use investigatory powers in all hearings and to make investigations necessary and proper for exercise of the powers vested in it by section 10. Congressional reports indicated that the purpose of the mandatory language in

¹⁵ *Herny v. Parsons* (U. S. C. A. (D. C.)), Feb. 20, 1950.

section 10 (k) was merely to secure expeditious hearing of bona fide jurisdictional-dispute cases and afford interim relief in certain cases in which the Board desired to preserve the status quo pending the final outcome of litigation.

Intra-Union Affairs. A Federal district court held¹⁸ that it had jurisdiction to enjoin an international union from unlawfully expelling one of its locals.

The court found that the expulsion was for the purpose of wreaking vengeance on the local for demanding the international's intervention in the estate of a deceased union leader who was accused of embezzling the local union's funds. While reluctant to interfere in union affairs, because of a clause in the international's constitution prohibiting recourse to courts of law or equity, the court held that this case was not covered by that prohibition, because the property rights of the local were involved. The international officers were held to have acted arbitrarily, and the local union's possibility of appealing to a convention at some future date was held to be wholly inadequate.

Veterans' Reemployment

Res Judicata in Reemployment Cases. The Court of Appeals for the Sixth Circuit recently reviewed¹⁹ a District Court decision dismissing as already adjudicated the claim of certain veterans that they had been deprived of seniority and discharged without cause in violation of reemployment statutes.

The veterans, returning from military service, found that during their absence their employer, the Highland Co., had merged with another enterprise, the Trailmobile Co. They found themselves at the bottom of the seniority list because a union agreement made in their absence, and after the merger, gave the Highland employees seniority from date of merger, whereas Trailmobile employees had seniority from date of original employment by Trailmobile Co. The employer, union, and collective bargaining agreement involved were identical with those considered by the United States Supreme Court in a previous

case.²⁰ In that case, however, the merger occurred after the veteran's return from military service; and the reduction of seniority and consequent discharge which occurred after the statutory year, were held not to violate the statute because there was no discrimination against veterans as such.

The Trailmobile Co. had, during the pendency of the *Whirls* case, brought a class suit to decide the proper seniority for all its employees, but this was dismissed²¹ as implicitly decided by the *Whirls* decision. In the instant case, the Court of Appeals considered that on the seniority issue the veterans' claim was already adjudicated, since every question of law based on the facts either was or could have been decided in the other suits. However, since the dates on which these veterans claimed a discharge "without cause" fell after the dismissal of the class action, the lawfulness of their discharge for reasons other than their new seniority standing could not have been decided by that dismissal. The case was sent back to the lower court for trial on the issue of lawfulness of their discharge.

Suggested differences between Britt's seniority claim and the adjudicated issues which the Court of Appeals found *not* significant were as follows: Britt had not before induction been a member of the union which contracted unfavorably concerning the Highland employees; he was in military service when the agreement was made; his seniority was affected during the first year of reemployment.

Decisions of State Courts

California—Picketing Home of Employer. The California Superior Court for Los Angeles County held²² that a union might lawfully picket the home of the owner of a group of stores with whom the union was having a labor dispute. The picketing was held not to be an undue invasion of the owner's right of privacy. The court pointed out that similar annoyance to the employer might be caused by a newspaper advertisement or by a radio program. The fact that the employer might be embarrassed by having the labor dispute called to the attention of his friends was no ground

¹⁸ *Printing Pressmen's Union, No. 1, of Washington, D. C. v. Internat. Printing Pressmen and Assistants' Union of North America* (U. S. D. C., D. C., Feb. 16, 1950).

¹⁹ *Britt v. Trailmobile Co.* (U. S. C. A. (6th), Jan. 24, 1950).

²⁰ *Whirls v. Trailmobile Co.* (331 U. S. 40).

²¹ *Trailmobile Co. v. International Union* (162 F. 2d 720).

²² *Zeeman v. Amalgamated Retail and Department Store Employees* (Cal. Super. Ct., Los Angeles Co., Jan. 27, 1950).

for denying the union the right to publicize its views.

California—Picketing—Injunctions. The same court held²³ that picketing could not be enjoined as "untruthful" when the "untruth" expressed was merely a matter of opinion. A union placard stating that a certain shop was "nonunion" was held to be such an expression of opinion. However, the court held that it had jurisdiction to decide whether such action was enjoinable, even though the owner was engaged in interstate commerce and was subject to the Labor Management Relations Act of 1947, when the National Labor Relations Board had refused to take jurisdiction in unfair-labor-practice proceedings against the union. While the NLRB had exclusive jurisdiction over unfair labor practices affecting interstate commerce under Federal law, that did not prevent a State court from enjoining such activity.

New York—Representation—Majority Status. A New York trial court enforced²⁴ a State labor relations board decision ordering recognition of a certain labor union which had been chosen by a majority of the employees in a unit as their bargaining representative. The employer's defense that the union had won the representation election by intimidation and no longer represented a majority of the employees was held to be without merit. These contentions, the court stated, should have been presented in the representation proceedings. Now that the union was validly certified as bargaining agent, it was immaterial whether it still represented a majority, insofar as the enforcement of the order to bargain was concerned.

New York—Picketing—Misleading Signs. A trial court held²⁵ that picketing with misleading signs was enjoinable. The picketing union's signs stated

that employees of a certain firm were on strike, when, actually, employees of another firm, owned by the same person were on strike. The court refused to issue the injunction, however, when the union agreed to withdraw these picket signs.

Texas—Place of Picketing. The Texas Court of Civil Appeals upheld²⁶ a trial court's injunction prohibiting a union from picketing a building, except for that part of the front occupied by the employer with whom the union had a labor dispute.

The union's dispute was with the Alameda Theatre in the International Building. The union picketed the whole building, although the theater fronted on only part of it, because, both the entrance for employees and the entrance to the business office of the theater were through the main entrance to the building. The picket signs had "Alameda" and "unfair" in large letters, and "theatre" in smaller letters. An "Alameda" jewelry store and an "Alameda" studio complained that their customers were being misled.

The court held that the union could not justify picketing the whole building. It held that the union could accomplish its purpose of informing the theater's patrons about a labor dispute by simply picketing the front of the theater.

Wisconsin—Breach of Arbitration Contract. A Wisconsin circuit court held²⁷ that a bus company employer must abide by an arbitration contract with a union. The company had claimed the right to refuse because it was subject to the provisions of the State compulsory arbitration law for public utilities. This law did not prohibit private arbitration contracts, the court held. At any rate, the compulsory arbitration law applied only when negotiations between union and employer had reached an impasse. There was no evidence of this in the present case. The company's claim that it signed the arbitration agreement "under duress" was held to be without foundation in view of renewals of this contract by the employer.

²³ *Caneer v. Retail Clerks International Assn., AFL* (Cal. Sup. Ct., Los Angeles Co., Jan. 31, 1950).

²⁴ *New York Board v. Morales* (N. Y. Sup. Ct., Spec. Term, Pt. I, Kings Co., Jan. 9, 1950).

²⁵ *Pineus v. Miller* (N. Y. Sup. Ct., Spec. Term, Pt. I, Kings Co., Jan. 23, 1950).

²⁶ *Motion Picture Machine Operators Local No. 477 v. Zaragoza Amusement Co.* (Tex. Ct. Civ. App., 4th Supr. Judic. Dist., Dec. 14, 1949).

²⁷ *Madison Bus Co. v. Wisconsin Employment Relations Bd.* (Wis. Cir. Ct., Dane Co., Oct. 28, 1949).

Chronology of Recent Labor Events

February 13, 1950

THE SUPREME COURT of the United States upheld the authority of the National Labor Relations Board to exercise exclusive jurisdiction over labor disputes involving an issue covered by a Federal labor law. It reversed a lower court decision in the case of *Plankinton Packing Co. v. Wisconsin Employment Relations Board et al*, which held that, under State law, the State Board had jurisdiction over a labor dispute, even though it arose in an industry subject to the LMRA and involved a union certified by the NLRB. (Source: Labor Relations Reporter, vol. 25, No. 31, Feb. 20, 1950, Analysis p. 63, LRR 212.)

THE SUPREME COURT of the United States refused to review a lower court decision in the case of *National Maritime Union of America (CIO) v. NLRB*, and thereby, in effect, held that the hiring hall system as operated in the Great Lakes area by the NMU discriminated against non-union members in violation of the Labor Management Relations Act. This was the first case to reach the Court concerning the LMRA. (Source: U. S. Law Week, vol. 18, p. 3233, Feb. 14, 1950.)

February 15

THREE UNIONS were expelled from the Congress of Industrial Organizations for "consistent, unwavering support of the policies of the Communist Party". The charters of the Mine, Mill, and Smelter Workers, the United Office and Professional Workers, and the Food, Tobacco, Agricultural and Allied Workers were revoked by the CIO Executive Board as a result of action taken at the 1949 National CIO Convention (see Chron. item for October 31, 1949, and discussion p. 640, MLR, Dec. 1949).

On February 16, the expulsion of the United Public Workers brought to 6 the total of national unions ousted from the CIO since autumn 1949. (Source: CIO News, Feb. 20, 1950, p. 6.)

THE NLRB, in the case of *H. A. Laboratories, Inc. and United Construction Workers, United Mine Workers of America (then AFL)*, ruled that an employer's refusal to rehire a laid-off worker, who called the company's president a "Fascist" while distributing union literature in front of the plant, was not discriminatory. The Board found that such remarks were not the result of particular provocative remarks on the employer's part nor were they made in a bargaining conference or on a picket line where

"lower standards of etiquette generally prevail." (Source: Labor Relations Reporter, vol. 25, No. 33, Feb. 27, 1950, p. 1381, 25 LLRM; for discussion, see p. 428 of this issue.)

THE SOCIAL COMMITTEE of the United Nations' Economic and Social Council joined with the International Labor Organization in establishing a fact-finding commission to investigate violations of labor's right to organize and form unions in member countries of the ILO. Complaints, however, cannot be brought before the Commission without consent of the government concerned. (Source: New York Times, Feb. 16, 1950, and ILO News Service, Feb.-Mar. 1950.)

February 25

THE NLRB issued regulations clarifying the role of the General Counsel in the court enforcement of its orders. In future, the General Counsel must, without exception, petition for court enforcement of the Board's orders when the Board so directs. The appointment, transfer, demotion, or discharge by the General Counsel of any Regional Director or Officer-in-charge of a Sub-Regional office must also be approved by the Board. (Source: U. S. Law Week, vol. 18, No. 33, Feb. 28, 1950, p. 2381.)

March 5

THE UNITED MINE WORKERS OF AMERICA (Ind.) and the bituminous coal operators signed a contract which ended negotiations that had lasted over 10 months. (Source: UMW Journal, Mar. 15, 1950; for discussion, see p. III of MLR, Mar. 1950.)

On March 2, the Federal District Court of the District of Columbia had found the UMWA innocent of criminal and civil contempt of court because the Federal Government failed to prove that the union had disobeyed the temporary restraining order (see Chron. item for Feb. 11, 1950, MLR, Mar. 1950). (Source: UMW Journal, Mar. 15, 1950.)

On March 3, President Truman recommended that Congress enact legislation empowering him to take possession and assume control of the coal mines until such time as an agreement was reached between the operators and the union. (Source: Congressional Record, vol. 96, No. 44, Mar. 3, 1950, p. 2769.)

On March 9, the UMWA signed an agreement with the anthracite operators similar to the bituminous contract. (Source: UMW Journal, Mar. 15, 1950.)

March 6

A NEW YORK APPELLATE COURT ruled that 500 sanitation employees who engaged in a work stoppage over the suspension of 18 fellow-workers did not violate New York State's Condon-Wadlin law barring strikes by State or city employees. The law prohibits strikes "for the purpose of inducing, influencing, or coercing a change in the conditions or compensation of the rights, privileges or obligations of their employers." The strikers, the court ruled, were not motivated by any of these reasons and are therefore "innocent of any violation of the statute, its intent or purport." (Source: New York Times, Mar. 7, 1950.)

Publications of Labor Interest

Special Reviews

Labor Relations in the New York Rapid Transit Systems, 1904-1944. By James J. McGinley. New York, King's Crown Press, 1949. 635 pp., bibliography. \$6.50.

A study of industrial relations through four decades in one of the basic public utilities in the Nation's largest city. It contains an impressive amount of information on the New York rapid transit industry under both private and public management; on the complex labor force required to operate the system; on the changing wages, hours, and conditions of employment of the workers; on union organization and tactics; and on the problems of industrial relations that are made more intricate by the nature of the industry and, in recent years, by the character of its ownership and the status of its workers as civil servants. Events during 1945 and 1946 are covered in an epilogue.

Special interest attaches to the volume for at least two reasons. First, there is growing concern with the "public interest" aspects of industrial relations, both in industries recognized traditionally as public utilities and in other industries in which prolonged work stoppages tend to have widespread secondary effects. The analysis of industrial relations problems on the New York rapid transit system may contain useful insight for other situations.

Second, there is the paradox that the major contemporary union in the New York transit system, although composed predominantly of Irish-Catholics, was generally counted, until recently, as one of the organizations following the Communist Party line. The author's explanation of the attitude of the rank and file in this matter appears convincing; it also points a moral for those who would prevent the growth of the Communist brand of totalitarianism in the labor movement.

Despite its length, there is life to this book. Father McGinley has organized his facts skillfully, and he writes clearly on the basis of first-hand knowledge of the workers, their jobs, and their attitudes.

—H. M. D.

The Market for College Graduates, and Related Aspects of Education and Income. By Seymour E. Harris. Cambridge, Mass., Harvard University Press, 1949. 207 pp., charts. \$4.

Editor's Note.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. When data on prices were readily available, they have been shown with the title entries.

The subject of this book is the increasing oversupply of college graduates and its economic and social implications. The analysis of the future supply of college graduates assumes fulfillment of the recommendation of the President's Commission on Higher Education that there be an enrollment of 4.6 million college students by 1960. Estimates are made of the number of graduates who will be seeking jobs in the professions and managerial occupations—fields traditionally entered by college graduates—if an enrollment of this magnitude takes place. The author also considers the prospects for expansion in the professions and in managerial positions. His conclusion is that by 1968 professional openings would be scarcely one-half of the number required to take care of the estimated job seekers, and that managerial openings would likewise be far below the number needed. If college enrollment should rise to only 3 million, a figure he considers more likely to be realized than the Commission's goal of 4.6 million, he thinks there would still be a serious problem of over-crowding in the professions.

A consequence of the oversupply of college-trained personnel will be lower incomes in the professions and other white-collar occupations. Unemployment is likely to develop in many professional fields. The author emphasizes the dangers inherent in the prospect by pointing out the great part unemployed and frustrated intelligentsia played in the political tensions and revolts in Europe during the 1930's.

Consideration is given to special measures to expand professional opportunities. The author believes that a frontal attack on "restrictionism" in some professions, notably medicine, would result in a considerable increase in openings. Government intervention to provide incentives for a better regional distribution of college-trained personnel would also be of assistance.

In favor of expanded college education is the contribution this might make to economic stability. By removing great numbers of potential workers from the labor market, and by providing an outlet for spending, education might, in the long run, help considerably in solving the problem of insufficiency of demand for goods and services in our maturing economy. Furthermore, a college education for an increasing proportion of the country's youth would reflect our democratic tradition of equal opportunities.

Dr. Harris emphasizes that institutions of higher education must adapt themselves to students' needs and provide special curricula for those without verbal aptitudes; if this is not done, the effect of the expanded enrollments will be to lower educational standards generally. He also emphasizes that students and the general public must understand the advantages of higher education aside from preparation for selected professions, and that many college-trained people must be prepared to content themselves with clerical, sales, and manual jobs.—H. W.

Child Labor

State Child-Labor Standards: A State-by-State Summary of Laws Affecting the Employment of Minors Under 18 Years of Age. Washington, U. S. Department of Labor, Bureau of Labor Standards, 1949. 182 pp. (Bull. No. 114.)

Wisconsin Child Labor Statistics, 1948. [Madison], Industrial Commission of Wisconsin, Statistical Department, 1949. 19 pp., charts; processed.

Wisconsin Street Trades and Public Exhibition Permits, 1948. [Madison], Industrial Commission of Wisconsin, Statistical Department, 1949. 15 pp.; processed.

Cooperative Movement

Consumers' Cooperatives: Operations in 1948—A Report on Membership, Business, and Operating Results. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1949. 15 pp. (Bull. No. 971.) 15 cents, Superintendent of Documents, Washington.

Operations of Credit Unions in 1948. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1949. 4 pp. (Serial No. R. 1969; reprinted from Monthly Labor Review, September 1949.) Free.

Annual Report of the Commissioner of Banks, [Massachusetts] for the Year Ending December 31, 1948: Part IV, Relating to Credit Unions. Boston, 1949. 38 pp.

Contains consolidated reports for all the credit unions in Massachusetts on membership, loans made and outstanding, earnings, and assets and liabilities; also similar data for each individual association.

Telling the Co-op Story: An Educational Handbook for Rural Electric Co-ops. Washington, U. S. Department of Agriculture, Rural Electrification Administration, 1949. 71 pp., bibliographies, illus. (Department of Agriculture Miscellaneous Publication No. 685.) 35 cents, Superintendent of Documents, Washington.

Discusses the various ways in which members and the public can be told about REA cooperatives and their advantages. These include personal contacts, demonstrations, educational meetings, talks, printed material, pictures and other visual methods, and local press and radio.

Internationella Kooperativa Problem. By Thorsten Odhe. Stockholm, Kooperativa Förbundets Bokförlag, 1949. 75 pp.

Discussion of the cooperative movement throughout the world, as integrated in the International Cooperative Alliance, International Cooperative Trading Agency, and International Cooperative Petroleum Association; the obstacles to free international cooperative trade and production; and the relationship between the International Trading Organization of the UN and the cooperative movement.

Annual Report of Director of Cooperation, Malayan Union, for Year Ending December 31, 1947. By J. G. Crawford. Kuala Lumpur, 1948. 18 pp., map.

Reports on the status of the various types of cooperatives in the Malay Peninsula, with statistics of membership, working capital, loans made, etc., and discussion of financial and other problems entailed by the prolonged Japanese occupation during the war.

Med Förenade Kraftar—Kooperativa Förbundet, 1899-1949. By Walter Sjölin. [Stockholm, Nordisk Rotogravyr, 1949.] 272 pp., illus.

Story of the Swedish Cooperative Union and Wholesale,

Kooperativa Förbundet, since its formation in 1899. Told mainly through the medium of pictures taken and collected over the years, it throws particular light on the manufacturing activities of the society.

Education and Training

Occupational Distribution of Apprentices Registered as of June 30, 1949, and Expected Year of Completion. Washington, U. S. Department of Labor, Bureau of Apprenticeship, 1949. 87 pp.; processed. (Technical Bull. No. T-124.) Free.

The University of Wisconsin School for Workers—Its First Twenty-five Years. By Ernest E. Schwarztrauber. Madison, University of Wisconsin School for Workers, 1949. 40 pp., illus.

Methods and Standards for Guidance, Training, and Placement: Proceedings of Second Annual Workshop of Guidance, Training, and Placement Supervisors, Washington, D. C., April 18-22, 1949. Washington, Federal Security Agency, Office of Vocational Rehabilitation, 1949. 81 pp.; processed. (Rehabilitation Service Series, No. 106.)

Teaching Apprentices and Preparing Training Materials. By Miles H. Anderson. Chicago, American Technical Society, 1949. 170 pp., forms, illus.

National Apprenticeship Standards for Commercial Establishments in the Photoengraving Industry. Washington, American Photoengravers Association and the International Photoengravers' Union of North America in cooperation with U. S. Department of Labor, Bureau of Apprenticeship, 1949. 27 pp. Free.

Employment and Unemployment

Employment Outlook for Elementary and Secondary School Teachers. Washington, U. S. Department of Labor, Bureau of Labor Statistics, and Veterans Administration, 1949. 89 pp., charts. (Bull. No. 972.) 35 cents, Superintendent of Documents, Washington.

Data from this report were published in the Monthly Labor Review for February 1950 (p. 146).

Keeping Pace With Veteran Employment: Report of Activities of Veterans Employment Service, July 1948-June 1949. Washington, U. S. Department of Labor, U. S. Employment Service, Veterans Employment Service, 1949. 30 pp., illus.

The Measurement of Industrial Employment by the Bureau of Labor Statistics. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1949. 13 pp.; processed. Free.

National and International Measures for Full Employment. Report by group of experts appointed by Secretary-General of United Nations. Lake Success, N. Y., United Nations, Department of Economic Affairs, 1949. 104 pp. 75 cents, Columbia University Press, International Documents Service, New York.

A study of the problems of giving effect to the pledge, in the United Nations charter, of joint as well as separate action by member States to maintain full employment. The report is limited to a consideration of unemployment resulting from a deficiency of demand and to recommendations for dealing with that phase of the unemployment problem. The view is expressed that the problem of full employment can be solved only in the context of an expanding world economy, of which the economic development of underdeveloped countries forms the most important single element. The recommendations are described as designed to provide a framework within which the countries of the world can obtain the advantages of both full employment and an expanding volume of world trade. Professor J. M. Clark, one of the American experts, submitted a "Separate Concurring Statement." He signed the general report but emphasized the need for giving further consideration to such problems as "the effect of the wage-price structure and behavior on aggregate effective demand and employment."

A more detailed summary of this report is given on page 379 of this issue of the *Monthly Labor Review*.

Estimated Employment and Wages of Workers Covered by State Unemployment Insurance Laws, 1948. Washington, U. S. Department of Labor, Bureau of Employment Security, 1949. 22 pp.; processed.

Community Programs to Combat Unemployment—A Survey of Regional, State, and Local Activities. Washington, U. S. Department of Labor, Bureau of Employment Security, Office of Reports and Analysis, 1949. 33 pp.; processed.

Handicapped

Brass Tacks—Some Pertinent Facts About the Economic and Social Aspects of the State-Federal System of Vocational Rehabilitation for Civilians. Washington, Federal Security Agency, Office of Vocational Rehabilitation, 1949. 21 pp., illus.

1949 Report of Connecticut Committee for the Employment of the Physically Handicapped. (In *Monthly Bulletin*, Department of Labor, Hartford, Conn., December 1949, pp. 3-25, illus.).

Covers observance of National Employ the Physically Handicapped Week and the year-round program of the 18 community committees in Connecticut.

A Square Deal. London, Ministry of Labor and National Service, 1949. 6 pp.

Gives examples of how handicapped workers have been employed in different British industries.

Housing

A Handbook of Information on Provisions of the Housing Act of 1949 and Operations Under the Various Programs. Washington, U. S. Housing and Home Finance Agency, Office of the Administrator, 1949. 30 pp.

Highlights provisions concerning slum clearance, public low-rent housing, farm housing, and housing research. A brief summary of the Act is appended.

Annual Report of National Capital Housing Authority, for the Fiscal Year Ended June 30, 1949. Washington, National Capital Housing Authority, 1949. Variously paged; processed.

Low-Cost Housing in Latin America. By Francis Violich. Washington, Pan American Union, Department of Economic and Social Affairs, Division of Labor and Social Information, 1949. 93 pp., illus. \$1.

Industrial Hygiene

Industrial Toxicology. By Alice Hamilton, M.D., and Harriet L. Hardy, M.D. New York, Paul B. Hoeber, Inc., 1949. 574 pp., bibliography (75 pp.). 2d ed., rev. and enl. \$6.50.

Comprehensive, nontechnical work on industrial poisons, by two industrial physicians—one (Dr. Hamilton) a pioneer investigator of the "dangerous trades". Physiological effects on workers and methods of control are discussed, against an extensive informational background. New uses of older poisons, "enormous expansion in the number of solvents, metals, and radioactive substances," and whole new industries, have necessitated additions and revisions in the 1934 edition. Significant chapters on beryllium and radiant energy (including the relationship of atomic energy to industry) have been added. Other chapters cover synthetic rubber, plastics, welding, and occupational cancer.

Industrial Toxicology. By Lawrence T. Fairhall. Baltimore, Williams and Wilkins Co., 1949. xi, 483 pp., bibliographies, diagrams. \$6.

A concise manual on toxic industrial substances by the chief of the Industrial Hygiene Laboratory, U. S. Public Health Service, describing briefly characteristics, industrial uses, toxicity, and analysis. Physiological action and standards of permissible exposure are also discussed.

Industrial Hygiene and Toxicology, Vol. II. Edited by Frank A. Patty. New York, Interscience Publishers, Inc., 1949. xxviii, 604 pp. \$15.

Considers primarily the various atmospheric contaminants encountered in industry. Their uses, industrial exposures, properties, and physiological effects are described, together with analytical methods of detection and measurement, maximum permissible concentrations, and their warning properties. Special attention was given to lead poisoning, because of its "unnecessarily high incidence," and to the recognition and control of potential exposures in a number of occupations, processes, or industries.

Vol. I deals with the broad aspects of industrial hygiene (see *Monthly Labor Review*, October 1949, p. 433). The two volumes are the joint product of the director of the Industrial Hygiene Service, General Motors Corp., Detroit, physicians, and other specialists.

A Guide to the Diagnosis of Occupational Diseases—A Reference Manual for Physicians. Compiled jointly by the staffs of Industrial Health Division, Department of National Health and Welfare of Canada, and Division of Industrial Hygiene, Department of Health

of Ontario. Ottawa, 1949. 317 pp., bibliography, diagrams. \$1.

Compact summarization, for nonprofessional use also, consisting largely of a list of occupations and their potential health hazards. Discusses occupational dermatoses; lists specific occupational skin irritants; describes various categories of harmful environmental conditions and substances; reviews pertinent provisions in workmen's compensation laws in Canada; and gives a table of compensable occupational diseases (1948) by Province.

Industrial Relations

Analysis of 31 Southern Textile Labor Contracts. By Henry N. Mims and Guy B. Arthur, Jr. Toccoa, Ga., Management Evaluation Services, Inc., 1949. 108 pp.; processed.

114 Check Points on How to Prevent Grievances. By Bleick von Bleicken and Carl Heyel. Deep River, Conn., National Foremen's Institute, Inc., 1949. 34 pp.

Stating that wise management recognizes grievances as "symptoms of costly dislocations somewhere along the line," the authors list 114 check points for the use of company executives who wish to "survey all of the factors surrounding the employment situation."

The Economics of Collective Bargaining. Edited by Charlotte Knight. Berkeley and Los Angeles, University of California, Institute of Industrial Relations, 1950. 108 pp. \$1.

Series of public lectures delivered in 1948 and 1949 in Berkeley and Los Angeles under auspices of Institute of Industrial Relations.

Outline for Collective Bargaining: A Union Man's Check-List. By Arnold F. Campo. Stanford, Calif., Stanford University, Division of Industrial Relations, 1949. 5 pp.; processed. (Industrial Relations Paper No. 2.)

Regulation of Collective Bargaining by the National Labor Relations Board. By Archibald Cox and John T. Dunlop. (In Harvard Law Review, Cambridge, Mass., January 1950, pp. 389-432. \$1.10.)

The authors analyze Labor Relations Board problems involved in determination by the Board of the subject matter of collective bargaining. They conclude that "the considerations in favor of leaving to private negotiation the work of defining management functions, joint responsibilities, and union functions far outweigh the arguments for government determination."

The Collective Bargaining Agreement: Its Nature and Scope. By Charles O. Gregory. (In Washington University Law Quarterly, No. 1, Washington University School of Law, St. Louis, Mo., Fall 1949, pp. 3-23. \$4 per year, \$1 per copy.)

The article listed discusses the legal aspects of union bargaining techniques. It is one of four special articles in a new law journal. The other articles are: "Criteria in Wage Rate Determinations," by Edwin E. Witte; "Minimizing Labor Disputes: Processing Grievances, Conciliation and Mediation," by William F. White; and

"Arbitrations and Labor Relations," by Clarence M. Updegraff.

Welfare Issues in Collective Bargaining, with a Paper on Handling Lay-Off Problems. New York, American Management Association, 1949. 40 pp. (Personnel Series, No. 131.) \$1.

Includes a panel discussion on the issue of pensions in collective bargaining, and a summary of the objectives of State sickness insurance systems.

Psychology of Labor-Management Relations. Edited by Arthur Kornhauser. Champaign, Ill., Industrial Relations Research Association (Secretary-Treasurer, 704 S. 6th Street), 1949. 122 pp. (Pub. No. 3.) \$1.50.

Proceedings of meeting held in Denver, September 7, 1949, under joint sponsorship of Industrial Relations Research Association, American Psychological Association, and Society for the Psychological Study of Social Issues.

Seniority: A Survey-Study of Industry Practice and the Principles Governing Length of Service As a Factor in Employment Relationships. New York, National Association of Manufacturers, Industrial Relations Division, 1949. 25 pp., bibliography; processed. (Management Memo No. 1.)

Jurisdictional Conflict in Labor Law: State Boards Versus the National Board. By David L. Benetar. (In American Bar Association Journal, Chicago, January 1950, pp. 27-30. 75 cents.)

Describes the causes of controversy and makes specific proposals for minimizing jurisdictional conflicts between State boards and the National Labor Relations Board.

Jurisdiction of the National Labor Relations Board Over the Building and Construction Industry. By Joe E. Covington. (In North Carolina Law Review, Chapel Hill, December 1949, pp. 1-35.)

Concludes that the NLRB could legally cover a large area of the building and construction industry if it asserted its powers.

Outstanding Books on Industrial Relations, 1949. Princeton, N. J., Princeton University, Industrial Relations Section, 1950. 4 pp. (Selected References, No. 31A.) 15 cents.

*Les Contrats des Travailleurs * * * et les Juridictions du Travail—Législation, Commentaire, Doctrine, Jurisprudence (1922-1947).* By R. Geysen. Brussels, Ferdinand Larcier, 1948. 395 pp.

Manual of terms used in labor-management relations in Belgium, alphabetized by major subjects. Terms are defined and documented by references to pertinent legislation and court decisions.

Labor and Social Legislation

Dictionary of Labor Law Terms. Chicago, Commerce Clearing House, Inc., 1949. 94 pp. \$1.

The Law of Civil Rights and Civil Liberties: A Handbook of Your Basic Rights. By Edwin S. Newman. New

York, Oceana Publications, 1949. 104 pp., map. (Legal Almanac Series, No. 13.) \$2, cloth bound; \$1, paper.

Provisions safeguarding free speech and equal opportunity in employment, housing, and health and welfare services are included.

Legislation for the Handicapped. By E. B. Whitten. (In American Vocational Journal, Washington, February 1950, pp. 19, 20, illus. 25 cents.)

The executive secretary of the National Rehabilitation Association reviews briefly developments in the total program for the handicapped from 1945-46 to 1948-49. In pointing out the need for additional legislation to promote rehabilitation of the handicapped, especially the more severely disabled, he also summarizes significant sections of H. R. 5577, a bill known as "National Services for the Handicapped" Act. Provisions of this bill include the establishment and maintenance of workshops for the severely disabled, and assistance to the homebound disabled in establishing themselves in remunerative employment.

Labor Laws of the State of Oklahoma, Edition 1949. Oklahoma City, Department of Labor, 1949. 148 pp.

A Survey of State Legislation [for the Blind]. By Helga Lende. (In Outlook for the Blind and the Teachers Forum, New York, January 1950, pp. 11-15. 25 cents.)

Summarizes developments in State legislation affecting the blind during 1949, on such subjects as financial aid, State services, tax exemptions, education, guide dogs, etc. A table of residence requirements and maximum aid allowed, by State, is appended.

State Regulation of the Concurred Activities of Labor. (In Illinois Law Review, Chicago, November-December 1949, pp. 714-719.)

State Minimum-Wage Laws and Orders, July 1, 1948-January 1, 1949. Washington, U. S. Department of Labor, Women's Bureau, 1949. 55 pp. (Bull. No. 227.) 20 cents, Superintendent of Documents, Washington.

1949 State Legislation of Special Interest to Women Workers. Washington, U. S. Department of Labor, Women's Bureau, 1950. 7 pp.; processed. Free.

Résumé of the Proceedings of the Sixteenth National Conference on Labor Legislation, November 29, 30, and December 1, 1949. Washington, U. S. Department of Labor, Bureau of Labor Standards, 1950. 35 pp. (Bull. No. 117.)

Social Recht. Brussels, Ferdinand Larcier, 1949. 153 pp. (Die Belgische Wetboeken, Tweetalige Uitgave.) In Dutch and French.

Compilation of the texts of all basic labor and social legislation now in force in Belgium.

Social Legislation and Work in Finland. Helsinki, Ministry for Social Affairs, 1949. 179 pp., illus.

Soviet Civil Law: Private Rights and Their Background Under the Soviet Regime—Volume 2, Translation. By Vladimir Gsovski. Ann Arbor, University of Michigan Law School, 1949. 907 pp.

Translations of basic Soviet civil acts, including selected labor laws, with explanatory comments. A list of Soviet statutes, 1917 to 1949, is given at the end of the volume.

Labor Organizations and Activities

Conventions of the AFL and CIO in 1949. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1949. 11 pp. (Serial No. R. 1979; reprinted from Monthly Labor Review, November and December 1949.) Free.

This is American Labor. (In Labor and Nation, New York, September-October 1949, pp. 1-106. \$1.50.)

This international issue of Labor and Nation is designed for extensive circulation abroad as well as in the United States. It has four sections devoted almost entirely to descriptive and historical accounts of American labor: (1) Labor in the setting of the Nation's economy and political institutions; (2) "American Unionism in Thought and Action," including articles on collective bargaining and the political ideas and influence of unions; (3) American labor and the European Recovery Program and other phases of international relations; and (4) "Inside the Union and About It," describing union life and activity, as, for example, union reports to members and union welfare plans.

38th Annual Report on Labor Organization in Canada, for the Calendar Year 1948. Ottawa, Department of Labor, Economics and Research Branch, 1949. 89 pp., charts. 25 cents.

Fifty Years' March—The Rise of the Labor Party. By Francis Williams. London, Odhams Press, Ltd., 1949. 384 pp., illus. 7s. 6d. net.

The former editor of the Daily Herald, labor's official newspaper in Britain, treats the early years of the British Labor Party. Little space is devoted to the Labor Party Government after 1945. Since the trade-unions were closely allied to the Labor Party, and used political action to make possible, and to supplement, industrial action, the more spectacular trade-union developments of the 50-year period are included. The relationship between union leaders and political leaders is touched on, chiefly in connection with Ramsay MacDonald's Governments.

Igdr og Idag—Arbeiderbevegelsen i Demokratiets Tidsalder. By Trygve Bull. Oslo, Arbeidernes Opplysningsforbund, 1949. 48 pp.

This booklet, entitled Yesterday and Today—Labor Movements in a Democratic Age, highlights the main points in both the history of the labor movement and the general political and economic situation in the world during the last 100 years. Particular attention is paid to developments since 1914.

Medical Care and Sickness Insurance

America's Health—A Report to the Nation. By the National Health Assembly. New York, Harper & Brothers, 1949. 395 pp. \$4.50.

Official report of the National Health Assembly convened by the Federal Security Administrator in Washington in May 1948 to develop a basis for the formulation of a 10-year national health program desired by the President.

A Pattern for Hospital Care: Final Report of the New York State Hospital Study. By Eli Ginzberg. New York, Columbia University Press, 1949. 368 pp. \$4.50.

The study includes evaluations of the trends in cost of hospital care in New York State, the economic position of nonprofit general hospitals, and the role of voluntary insurance—particularly prepayment plans under the Blue Cross and Blue Shield services—and of commercial insurance. Extension of the voluntary insurance principle to include 85 percent of the State's population within the next few years, with specified improvements and liberalization in plans, is advocated. Large numbers were found to be already insured at the end of 1948.

Postwar Trends in Social Security: Medical Care. (In International Labor Review, Geneva, August 1949, pp. 111-131; September 1949, pp. 238-261. 50 cents each. Distributed in United States by Washington Branch of ILO.)

Reviews developments in various countries as to public programs of medical care.

For the Disabled: Sick—Disability Compensation. By Nathan Sinai. Ann Arbor, University of Michigan, Bureau of Public Health Economics, 1949. 126 pp. (Research Series, No. 5.) \$1.

Analysis and appraisal of the principal statutory provisions and of the operations of existing compulsory State programs of temporary-disability insurance (nonoccupational) in Rhode Island, California, and New Jersey.

Compensation for Disability. By R. K. McNickle. Washington (1205 19th Street NW), Editorial Research Reports, 1949. 14 pp. (Vol. II, 1949, No. 20.) \$1.

Summary of issues involved in a proposal to add permanent and total disability benefits to the Federal social security system, with relevant background information.

Sickness Beneficiaries in 1948-49. (In Monthly Review, U. S. Railroad Retirement Board, Chicago, January 1950, pp. 11-15.)

Covers railroad workers paid sickness or maternity benefits under the Railroad Unemployment Insurance Act.

Minority Groups

The Negro Handbook, 1949. Edited by Florence Murray. New York, Macmillan Co., 1949. 368 pp. \$5.

The fourth issue of a biennial publication. Data concerning housing conditions, the labor movement, and the employment situation are included.

Race and Region: A Descriptive Bibliography Compiled with Special Reference to the Relations Between Whites and Negroes in the United States. By Edgar T.

Thompson and Alma Macy Thompson. Chapel Hill, University of North Carolina Press, 1949. 194 pp. \$5.

Includes references to material on the Negro in domestic service, business, and the professions.

Combating Discrimination in Employment in New York State. By Felix Rackow. Ithaca, N. Y., Cornell University, New York State School of Industrial and Labor Relations, 1949. 52 pp., bibliography, illus. (Research Bull. No. 5.) Free to residents of New York State; 15 cents to others.

Review of the work (to March 31, 1949) of the New York State Commission Against Discrimination, created by the State law against discriminatory practices in employment. The text of the law is reproduced in the pamphlet.

Trends in the Employment of Minority Groups. By John E. O'Gara and Julius A. Thomas. (In Personnel Series, No. 128, American Management Association, New York, 1949, pp. 15-23.)

Personnel Management

Lay-Off Policy and Procedure. Princeton, N. J., Princeton University, Industrial Relations Section, January 1950. 4 pp. (Selected References, No. 31.) 15 cents.

Installing and Maintaining an Employee Suggestion Program. Chicago, Dartnell Corporation, [1949?]. In 2 parts, variously paginated, forms, illus. (Report No. 589.) \$7.50.

Based on a survey of a large number of successful employee suggestion plans. Part I deals with essential policies of a good suggestion system. Part II describes methods of installing and operating suggestion plans and contains a statistical summary of important provisions of a number of particularly successful plans.

Personnel Policies and Salary Administration in 200 Offices. Chicago, Dartnell Corporation, [1949?]. Variously paginated; processed. (Report No. 587.)

Survey of Selected Personnel Practices in Los Angeles County as of April 1, 1949. Compiled by Robert D. Gray and staff. Pasadena, California Institute of Technology, Industrial Relations Section, 1949. 74 pp.; processed. (Bull. No. 17.) \$2.50.

The survey covered 711 companies and 371,086 factory and clerical workers.

Social Security

Old-Age and Survivors Insurance Program Analysis: Report 4, Causes of Relatively Low Average Monthly Wages Among Primary Beneficiaries. Washington, Federal Security Agency, Social Security Administration, Bureau of Old-Age and Survivors Insurance, 1949. 23 pp.; processed.

Systems of Social Security: New Zealand. Geneva, International Labor Office, 1949. 67 pp. 40 cents. Dis-

tributed in United States by Washington Branch of ILO.

Mémento des Prestations Familiales. By Guy Grimaud. Paris, SPID, 1949. 163 pp. 381 frs.

Guidebook to the system of family allowances in France, showing its legislative background, organization, and administrative procedures. Pertinent decree-laws are given in an appendix.

Welfare State Ideas and Practices. (In *Labor and Nation*, New York, Winter 1949-50, pp. 3-54. \$1.)

The issue is devoted largely to a series of articles on the "welfare state" as it has developed in Great Britain, the Scandinavian countries, and Australia. Additional articles deal with more general aspects of welfare policies.

Wages and Income

Income of Dentists, 1929-48. By William Weinfeld. (In *Survey of Current Business*, U. S. Department of Commerce, Office of Business Economics, Washington, January 1950, pp. 8-16, charts; also reprinted.)

A summary of this report, in addition to that for lawyers (August 1949 issue of *Survey of Current Business*), is given on page 396 of this issue of the *Monthly Labor Review*.

Incentive Wage Systems—A Selected Annotated Bibliography. Prepared by Robert L. Aronson. Princeton, N. J., Princeton University, Department of Economics and Social Institutions, Industrial Relations Section, 1949. 16 pp.; processed. (Bibliographical Series, No. 79, revised.)

Problems of Hourly Rate Uniformity. By John R. Abersold. Philadelphia, University of Pennsylvania Press, Wharton School of Finance and Commerce, Labor Relations Council, 1949. 60 pp. (Industry-Wide Collective Bargaining Series.) \$1.

A study of collective bargaining over hourly wage rates between a union and more than one company.

Wartime Wage Control in the United States. By Martin Stoller and Joseph S. Zeisel. (In *Business Record*, National Industrial Conference Board, Inc., New York, February 1950, pp. 74-78.)

Fourth installment in a series on wartime wage control, under the general title of "Economics of the Wage Freeze." The other articles in the series, dealing with Canada, Germany, and Great Britain, appeared in the *Management Record* for April, June, and August, 1949, respectively.

Wages Policy? By T. E. M. McKitterick. London, Fabian Society, 1949. 28 pp. (Challenge Series, No. 3; [Fabian Tract No. 270].) 1s.

After examining the possible effects of a national wages policy in Britain, the author concludes that efforts to control differentials between industries and occupations, to apply a universal rational system of payments by results, or to fix a national minimum wage, are unlikely to work. He concedes, however, that some control over the total amount of national product going into wages may be necessary in order to avoid inflation in a planned economy committed to full employment.

Women in Industry

Opportunities for Careers for Women. New York, National Federation of Business and Professional Women's Clubs, Inc., [1949?]. 34 pp.

How to Make a Home Business Pay. By Julietta K. Arthur. New York, Prentice-Hall, Inc., 1949. 330 pp., bibliographies. \$2.95.

Many and varied projects are discussed, illustrated by case histories of successful businesses developed by women in the home. Part 2, on "How to Stay in Business," includes chapters on management, selling, and laws and taxes that must be heeded. Many sources of additional information are listed.

Women in the Federal Service, 1923-1947: Part I, Trends in Employment. Washington, U. S. Department of Labor, Women's Bureau, 1949. 79 pp., charts. (Bull. No. 230-I.) 25 cents, Superintendent of Documents, Washington.

Night Work for Women in Hotels and Restaurants. Washington, U. S. Department of Labor, Women's Bureau, 1949. 59 pp., chart. (Bull. No. 233.) 20 cents, Superintendent of Documents, Washington.

Women in German Industry. By Sara Southall and Pauline M. Newman. Frankfort, Office of Military Government for Germany (U. S.), Manpower Division, 1949. 31 pp.; processed. (Visiting Expert Series, No. 14.)

Report on the status of women in industry and trade-unions, with pertinent recommendations for employers and union officials.

Available for reference in some of the larger public libraries and in libraries of some of the larger colleges and universities of the United States.

Current Labor Statistics

A.—Employment and Pay Rolls

- 442 Table A-1: Estimated total labor force classified by employment status, hours worked, and sex
- 443 Table A-2: Employees in nonagricultural establishments, by industry division and group
- 446 Table A-3: Production workers in mining and manufacturing industries
- 448 Table A-4: Indexes of production-worker employment and weekly pay rolls in manufacturing industries
- 449 Table A-5: Federal civilian employment by branch and agency group
- 450 Table A-6: Federal civilian pay rolls by branch and agency group
- 451 Table A-7: Civilian Government employment and pay rolls in Washington, D. C., by branch and agency group
- 451 Table A-8: Personnel and pay of the military branch of the Federal Government
- Table A-9: Employees in nonagricultural establishments for selected States¹
- Table A-10: Employees in manufacturing industries, by States¹
- 452 Table A-11: Insured unemployment under State unemployment insurance programs, by geographic division and State

B.—Labor Turn-Over

- 453 Table B-1: Monthly labor turn-over rates (per 100 employees) in manufacturing industries, by class of turn-over
- 454 Table B-2: Monthly labor turn-over rates (per 100 employees) in selected groups and industries

C.—Earnings and Hours

- 456 Table C-1: Hours and gross earnings of production workers or nonsupervisory employees
- 470 Table C-2: Gross average weekly earnings of production workers in selected industries, in current and 1939 dollars
- 471 Table C-3: Gross and net spendable average weekly earnings of production workers in manufacturing industries, in current and 1939 dollars
- 471 Table C-4: Average hourly earnings, gross and exclusive of overtime, of production workers in manufacturing industries
- Table C-5: Hours and gross earnings of production workers in manufacturing industries for selected States and areas¹

¹ This table is included quarterly in the February, May, August, and November issues of the Review.

D.—Prices and Cost of Living

472 Table D-1: Consumers' price index for moderate-income families in large cities, by group of commodities

473 Table D-2: Consumers' price index for moderate-income families, by city, for selected periods

474 Table D-3: Consumers' price index for moderate-income families, by city and group of commodities

475 Table D-4: Indexes of retail prices of foods, by group, for selected periods

476 Table D-5: Indexes of retail prices of foods, by city

477 Table D-6: Average retail prices and indexes of selected foods

478 Table D-7: Indexes of wholesale prices, by group of commodities, for selected periods

479 Table D-8: Indexes of wholesale prices, by group and subgroup of commodities

E.—Work Stoppages

480 Table E-1: Work stoppages resulting from labor-management disputes

F.—Building and Construction

480 Table F-1: Expenditures for new construction

481 Table F-2: Value of contracts awarded and force-account work started on federally financed new construction, by type of construction

482 Table F-3: Urban building authorized, by principal class of construction and by type of building

483 Table F-4: New nonresidential building authorized in all urban places by general type and by geographic division

484 Table F-5: Number and construction cost of new permanent nonfarm dwelling units started, by urban or rural location, and by source of funds

NOTE.—Earlier figures in many of the series appearing in the following tables are shown in the Handbook of Labor Statistics, 1947 Edition (BLS Bulletin 916). The Handbook also contains descriptions of the techniques used in compiling these data and information on the coverage of the different series. For convenience in referring to the historical statistics, the tables in this issue of the Monthly Labor Review are keyed to tables in the Handbook.

MLR table	Handbook table	MLR table	Handbook table	MLR table	Handbook table	MLR table	Handbook table
A-1-----	A-12	A-8-----	A-9	D-1-----	D-1	D-8-----	D-6
A-2-----	(¹)	B-1-----	B-1	D-2-----	D-2	E-1-----	E-3
A-3-----	(¹)	B-2-----	B-2	D-3-----	D-2	F-1-----	H-1
A-4-----	(¹)	C-1-----	(¹)	D-4-----	D-4	F-2-----	H-2
A-5-----	A-8	C-2-----	(¹)	D-5-----	D-2 and D-3	F-3-----	H-4
A-6-----	(¹)	C-3-----	C-10	D-6-----	D-4	F-4-----	(¹)
A-7-----	A-7	C-4-----	(¹)	D-7-----	D-6	F-5-----	I-3

¹ Not included in 1947 edition of Handbook.

A: Employment and Pay Rolls.

TABLE A-1: Estimated Total Labor Force Classified by Employment Status, Hours Worked, and Sex

Labor force	Estimated number of persons 14 years of age and over ¹ (in thousands)												
	1950		1949										
	Feb.	Jan.	Dec.	Nov. ²	Oct.	Sept. ³	Aug.	July ⁴	June	May	Apr.	Mar.	Feb.
Total, both sexes													
Total labor force ⁵	63,003	62,835	63,475	64,361	64,021	64,222	65,105	65,278	64,864	63,452	62,327	62,305	61,896
Civilian labor force	61,637	61,427	62,040	62,927	62,576	62,763	63,637	63,815	63,398	61,983	60,835	60,814	60,388
Unemployment	4,084	4,400	3,487	3,496	3,576	3,551	3,669	4,093	3,777	3,289	3,016	3,157	3,221
Unemployed 5 or 6 weeks	1,595	1,595	1,599	1,586	1,736	1,519	1,484	1,586	1,625	1,514	1,500	1,322	1,440
Unemployed 11-14 weeks	1,156	1,171	1,171	1,171	1,227	1,191	1,191	1,207	1,194	1,194	1,190	1,099	1,024
Unemployed 15-26 weeks	547	418	302	257	300	305	384	361	296	316	403	456	328
Unemployed over 26 weeks	680	542	456	450	471	507	473	439	453	490	456	401	286
Employment	56,953	56,947	58,556	59,518	59,001	59,411	59,947	59,720	59,619	58,694	57,819	57,647	57,167
Nonagricultural	50,730	50,749	51,793	51,640	51,293	51,254	51,441	50,073	49,924	49,720	49,999	50,254	50,174
Worked 35 hours or more	41,433	40,839	42,260	36,766	41,354	27,366	40,407	27,686	40,924	41,315	40,761	40,761	40,630
Worked 15-34 hours	5,271	6,251	6,126	11,383	6,058	19,683	5,231	14,701	5,425	5,073	5,913	5,964	5,737
Worked 1-14 hours ⁶	2,085	1,974	2,049	1,991	2,027	1,867	1,509	1,438	1,524	1,774	1,884	1,944	1,876
With a job but not at work ⁷	1,941	1,668	1,349	1,501	1,858	2,339	4,294	6,247	2,051	1,554	1,438	1,585	1,730
Agricultural	6,223	6,198	6,773	7,878	7,710	8,158	8,507	9,647	9,694	8,974	7,820	7,393	6,993
Worked 35 hours or more	4,334	3,979	4,778	6,205	5,462	6,294	6,724	7,326	7,400	7,159	5,656	4,973	4,591
Worked 15-34 hours	1,271	1,419	1,511	1,256	1,604	1,455	1,290	1,871	1,952	1,474	1,700	1,833	1,776
Worked 1-14 hours ⁶	300	329	297	238	365	269	264	262	228	211	243	357	367
With a job but not at work ⁷	317	431	189	179	279	140	228	189	116	130	221	231	260
Males													
Total labor force ⁵	45,115	45,102	45,174	45,515	45,413	45,759	46,613	46,712	46,282	45,327	45,143	45,000	44,721
Civilian labor force	43,769	43,715	43,765	44,009	43,988	44,319	45,163	45,267	44,832	43,886	43,668	43,525	43,229
Unemployment	3,426	3,262	2,472	2,316	2,563	2,233	2,519	2,845	2,594	2,366	2,205	2,433	2,417
Employment	40,343	40,453	41,293	41,783	41,426	42,085	42,644	42,422	42,233	41,521	41,463	41,092	40,812
Nonagricultural	34,698	34,880	35,369	35,484	35,123	35,521	35,549	34,799	34,706	34,411	34,714	34,622	34,689
Worked 35 hours or more	29,336	29,108	30,077	26,629	29,631	20,496	29,277	20,820	29,886	29,813	29,624	29,425	29,425
Worked 15-34 hours	2,909	3,711	3,424	6,922	3,234	12,063	3,080	9,604	3,004	2,766	3,237	3,286	3,199
Worked 1-14 hours ⁶	922	904	884	870	901	810	593	651	629	780	825	802	825
With a job but not at work ⁷	1,511	1,157	984	1,064	1,359	1,551	2,599	3,723	1,274	1,052	1,032	1,109	1,239
Agricultural	5,645	5,573	5,928	6,299	6,302	6,565	7,095	7,623	7,438	7,109	6,749	6,470	6,123
Worked 35 hours or more	4,176	3,817	4,497	5,335	4,896	5,465	6,019	6,356	6,453	6,249	5,372	4,738	4,344
Worked 15-34 hours	942	1,094	1,017	638	910	792	705	716	731	610	1,023	1,294	1,263
Worked 1-14 hours ⁶	228	262	234	152	247	179	161	185	148	134	153	222	270
With a job but not at work ⁷	208	399	177	173	249	128	209	168	105	115	201	216	246
Females													
Total labor force ⁵	17,888	17,733	18,301	18,848	18,608	18,463	18,492	18,566	18,584	18,115	17,184	17,305	17,175
Civilian labor force	17,868	17,712	18,280	18,828	18,588	18,444	18,474	18,548	18,566	18,007	17,167	17,289	17,159
Unemployment	1,258	2,118	1,017	1,093	1,013	1,118	1,170	1,280	1,180	923	811	734	804
Employment	16,610	16,494	17,263	17,735	17,575	17,326	17,303	17,268	17,386	17,173	16,555	16,355	16,355
Nonagricultural	16,032	15,869	16,414	16,156	16,167	15,733	15,862	15,274	15,128	15,309	15,285	15,632	15,485
Worked 35 hours or more	12,097	11,731	12,183	10,137	11,723	6,868	11,130	6,866	11,035	11,502	11,140	11,336	11,405
Worked 15-34 hours	2,362	2,540	2,702	4,461	2,822	7,020	2,151	5,097	2,421	2,307	2,676	2,678	2,538
Worked 1-14 hours ⁶	1,163	1,070	1,165	1,121	1,127	1,057	916	787	896	998	1,063	1,142	1,031
With a job but not at work ⁷	410	529	365	437	496	788	1,695	2,524	777	502	406	476	491
Agricultural	578	625	849	1,579	1,404	1,593	1,412	2,024	2,258	1,865	1,071	923	870
Worked 35 hours or more	158	162	281	870	566	829	705	970	947	910	284	235	247
Worked 15-34 hours	329	365	494	618	694	663	585	655	1,221	864	677	539	513
Worked 1-14 hours ⁶	72	67	63	86	118	90	103	77	80	77	90	134	97
With a job but not at work ⁷	19	32	12	6	30	12	19	21	11	15	20	15	14

¹ Estimates are subject to sampling variation which may be large in cases where the quantities shown are relatively small. Therefore, the smaller estimates should be used with caution. All data exclude persons in institutions. Because of rounding, the individual figures do not necessarily add to group totals.

² Census survey week contains legal holiday.

³ Total labor force consists of the civilian labor force and the armed forces.

⁴ Excludes persons engaged only in incidental unpaid family work (less than 15 hours); these persons are classified as not in the labor force.

⁵ Includes persons who had a job or business, but who did not work during the census week because of illness, bad weather, vacation, labor dispute or because of temporary lay-off with definite instructions to return to work within 30 days of lay-off. Does not include unpaid family workers.

Source: U. S. Department of Commerce, Bureau of the Census.

TABLE A-2: Employees in Nonagricultural Establishments, by Industry Division and Group¹

[In thousands]

Industry group and industry	1949												Annual average		
	1950						1949								
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1948	1947
Total employees.....	41,680	42,158	43,696	42,784	42,601	43,466	42,994	42,573	42,835	42,731	42,966	42,918	43,061	44,201	43,371
Mining	617	886	940	917	993	948	956	943	968	974	984	981	998	981	943
Metal.....	91.3	91.1	91.6	83.1	64.7	91.7	90.8	94.5	100.3	101.1	103.1	102.0	101.1	98.5	96.8
Iron.....	33.3	33.5	27.9	9.2	35.5	36.0	38.4	36.8	36.8	36.5	35.2	35.2	35.5	33.5	33.1
Copper.....	21.8	21.7	21.2	21.2	21.1	21.1	21.2	22.2	22.8	23.2	23.5	22.5	22.3	22.5	22.5
Lead and zinc.....	18.2	18.4	17.3	17.1	18.0	18.0	18.7	21.7	22.4	23.5	23.6	23.8	21.7	22.9	22.9
Anthracite	75.6	76.3	76.7	76.2	75.6	75.7	75.5	77.1	77.0	78.3	78.6	79.5	80.0	79.4	
Bituminous-coal	110.5	350.4	424.3	407.1	99.8	421.1	424.7	410.1	431.2	438.4	440.4	445.0	444.9	431.8	
Crude petroleum and natural gas production	251.8	233.7	254.8	256.2	260.7	262.9	263.5	261.9	260.1	258.8	257.4	255.3	257.5	237.3	
Nonmetallic mining and quarrying	88.7	88.9	93.0	95.7	95.9	98.7	99.1	99.1	97.8	97.5	97.3	94.5	92.5	100.1	97.8
Contract construction	1,829	1,914	2,088	2,244	2,313	2,341	2,340	2,277	2,205	2,137	2,036	1,947	1,926	2,165	1,988
Manufacturing	14,016	13,997	14,033	13,807	15,892	14,212	14,114	13,757	13,884	13,877	14,177	14,473	14,649	15,288	15,347
Durable goods ²	7,344	7,354	7,300	7,050	6,986	7,409	7,302	7,255	7,392	7,441	7,656	7,819	7,923	8,315	8,373
Nondurable goods ³	6,672	6,643	6,733	6,757	6,906	6,903	6,812	6,502	6,492	6,436	6,521	6,656	6,726	6,970	6,874
Ordnance and accessories	21.4	21.3	21.6	21.8	22.6	22.7	22.6	23.8	23.3	26.1	27.3	27.9	28.0	28.1	26.9
Food and kindred products	1,418	1,432	1,403	1,631	1,703	1,718	1,885	1,501	1,496	1,410	1,406	1,414	1,536	1,532	
Meat products.....	100.9	30.9	28.3	29.2	28.7	28.7	28.9	28.4	28.7	27.5	27.4	28.4	27.2	27.5	
Dairy products.....	131.4	131.1	136.3	142.2	146.9	156.5	162.3	161.6	153.9	146.3	141.4	136.7	141.7	146.0	
Canning and preserving.....	141.0	161.2	188.2	238.2	351.0	369.8	247.3	194.5	156.4	150.1	134.6	133.0	222.0	223.8	
Grain-mill products.....	119.6	120.6	122.9	125.4	123.6	122.5	121.8	119.4	118.7	116.4	117.8	118.9	117.7	116.9	
Bakery products.....	278.9	281.2	286.0	292.4	288.7	288.0	281.9	282.3	276.1	273.9	271.7	278.6	282.9	274.9	
Sugar.....	28.3	42.4	49.3	48.0	30.7	29.9	27.8	26.8	26.7	26.9	27.1	27.4	34.5	38.4	
Confectionery and related products.....	99.8	104.4	109.4	113.6	105.6	92.5	83.7	84.9	87.1	91.5	92.9	96.3	100.2	98.5	
Beverages.....	199.4	205.6	211.3	215.2	222.4	223.6	235.7	210.5	204.4	194.0	205.6	199.6	218.6	211.9	
Miscellaneous food products.....	132.2	135.8	139.9	142.9	142.5	140.2	140.0	138.5	135.5	136.2	132.8	134.2	141.3	144.1	
Tobacco manufactures	88	92	94	95	99	101	98	89	91	90	90	92	95	100	104
Cigarettes.....	26.3	26.8	26.9	26.9	27.0	26.9	27.0	26.9	26.8	26.8	26.8	25.8	26.6	26.2	
Cigars.....	42.3	43.1	45.5	45.5	47.5	45.2	44.3	42.9	44.4	43.3	42.9	45.4	45.5	48.3	49.4
Tobacco and snuff.....	12.8	12.9	12.9	13.1	13.1	13.1	12.5	13.0	12.6	12.8	13.1	13.3	13.7	14.8	
Tobacco stemming and redrying.....	10.9	10.7	10.2	12.0	16.0	14.1	6.7	6.7	6.9	7.5	7.8	10.0	11.2	13.0	
Textile-mill products	1,271	264	1,275	1,272	1,256	1,220	1,179	1,145	1,170	1,175	1,188	1,240	1,279	1,362	1,325
Yarn and thread mills.....	158.2	157.7	156.1	153.3	148.5	141.4	135.3	140.7	141.4	142.9	153.1	159.0	177.6	179.5	
Broad-woven fabric mills.....	596.3	604.0	601.9	594.8	577.0	559.7	548.1	555.2	557.1	560.3	589.5	613.4	645.7	618.3	
Knitting mills.....	241.5	244.7	247.8	244.8	237.0	227.7	218.8	220.8	222.0	223.2	231.8	239.0	242.4		
Dyeing and finishing textiles.....	89.3	90.0	89.5	87.5	85.4	82.6	81.3	83.4	85.4	87.1	87.9	89.0	89.8	88.8	
Carpets, rugs, other floor coverings.....	59.7	60.4	68.1	57.5	55.9	55.3	57.9	59.9	60.9	68.5	61.7	63.5	64.6	57.3	
Other textile-mill products.....	119.4	119.1	118.6	118.4	115.8	111.0	111.1	113.4	112.1	111.1	117.4	121.6	135.2	140.9	
Apparel and other finished textile products	1,183	1,151	1,158	1,144	1,190	1,196	1,155	1,055	1,073	1,070	1,121	1,166	1,171	1,182	1,130
Men's and boys' suits and coats.....	142.6	139.8	136.0	141.5	146.5	142.5	128.8	134.7	131.8	147.3	150.7	152.5	154.4	151.2	
Men's and boys' furnishings and work clothing.....	259.9	265.1	269.6	270.5	264.5	253.1	229.3	233.8	257.4	258.8	290.2	299.1	299.8		
Women's outerwear.....	337.0	330.6	313.7	342.2	333.1	341.1	296.5	292.1	290.7	322.0	332.3	339.7	342.4	336.4	
Women's, children's undergarments.....	102.9	104.7	108.5	107.2	104.0	98.2	90.8	92.5	94.1	95.1	97.3	97.9	97.4	98.5	
Millinery.....	24.7	22.7	18.5	23.8	24.0	23.1	20.4	17.3	20.3	23.1	25.6	25.5	22.9	23.9	
Children's outerwear.....	65.7	64.6	65.8	65.8	67.9	67.3	63.4	62.3	57.3	58.5	63.0	62.3	69.5	53.1	
Fur goods and miscellaneous apparel.....	80.1	90.6	95.9	98.4	95.5	91.1	84.7	86.4	83.4	83.0	84.4	84.1	90.1	83.5	
Other fabricated textile products.....	138.1	140.1	141.7	146.8	142.2	137.9	131.0	133.7	135.1	133.1	132.3	129.9	125.6	121.6	
Lumber and wood products (except furniture)	697	703	744	753	750	743	747	736	747	733	719	714	812	838	
Logging camps and contractors.....	44.6	61.5	63.7	64.0	59.5	62.3	62.7	63.8	63.3	58.1	60.3	68.8	72.8	81.1	
Sawmills and planing mills.....	411.0	434.2	442.7	444.0	445.4	444.8	438.8	442.1	430.4	418.8	415.6	408.5	472.9	488.3	
Millwork, plywood, and prefabricated structural wood products.....	117.2	117.5	116.3	113.4	110.1	109.4	106.6	108.4	105.2	108.1	107.9	109.7	119.5	113.2	
Wooden containers.....	73.2	73.9	73.0	72.2	71.7	72.0	71.1	73.7	73.7	73.4	73.8	74.5	81.8	87.3	
Miscellaneous wood products.....	56.7	57.1	56.9	56.7	56.7	55.1	58.0	58.8	59.2	60.3	61.4	62.2	65.2	68.4	
Furniture and fixtures	341	333	332	327	327	319	305	295	298	301	311	316	320	346	340
Household furniture.....	238.2	236.8	232.6	231.2	223.9	212.3	204.0	205.5	207.9	215.9	219.7	223.3	247.0	243.9	
Other furniture and fixtures.....	94.8	95.4	94.1	95.7	95.1	92.5	90.9	92.8	93.2	94.6	95.8	97.0	100.9	96.1	
Paper and allied products	449	450	454	458	456	445	436	429	434	437	442	451	456	470	465
Pulp, paper, and paperboard mills.....	228.2	220.0	229.3	228.1	225.6	219.5	217.8	221.7	223.3	226.2	231.5	233.9	240.7	234.0	
Paperboard containers and boxes.....	119.1	122.6	125.6	124.2	119.4	114.9	110.6	111.4	111.5	113.0	115.0	116.6	121.4	122.1	
Other paper and allied products.....	102.3	102.8	102.8	103.8	102.9	101.2	100.9	100.8	101.9	102.6	104.8	105.9	107.6	108.7	

See footnotes at end of table.

TABLE A-2: Employees in Nonagricultural Establishments, by Industry Division and Group¹—Con.

[In thousands]

Industry group and industry	1950						1949						Annual average		
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1948	1947
Manufacturing—Continued															
Printing, publishing, and allied industries	727	731	740	736	735	728	719	716	725	722	722	723	726	725	709
Newspapers	286.5	289.6	288.8	288.2	289.4	285.2	283.5	283.8	286.8	277.9	276.6	275.0	267.5	248.5	248.5
Periodicals	52.3	53.0	52.9	53.2	53.3	52.7	52.2	51.9	53.4	54.1	54.7	54.9	54.7	54.5	54.5
Books	45.2	47.5	45.7	45.5	45.1	45.5	41.5	41.4	44.8	45.0	45.0	45.1	45.4	46.6	45.6
Commercial printing	200.2	201.3	198.0	199.2	195.0	193.1	195.5	196.4	194.9	195.6	196.0	198.0	197.5	191.0	191.0
Lithographing	39.9	42.2	42.2	41.6	40.8	40.2	39.7	40.2	40.6	41.2	41.3	41.0	45.1	45.2	45.2
Other printing and publishing	106.7	108.3	108.1	107.7	107.3	106.3	103.8	107.9	107.6	108.4	109.1	110.5	113.3	115.6	115.6
Chemicals and allied products	664	659	661	662	665	654	636	642	646	675	691	693	699	692	692
Industrial inorganic chemicals	66.2	66.6	62.3	66.3	67.1	65.7	65.7	66.6	68.6	69.0	70.0	70.9	71.1	70.6	66.6
Industrial organic chemicals	187.9	187.8	187.0	185.6	184.7	180.3	181.1	185.0	188.3	195.9	205.7	211.4	210.3	205.5	205.5
Drugs and medicines	94.8	94.6	94.1	93.7	92.7	92.0	90.7	91.6	91.1	91.5	91.7	91.8	89.5	93.6	93.6
Paints, pigments, and filters	67.0	67.1	67.6	67.9	66.3	65.8	64.9	66.7	67.3	67.7	68.7	69.1	68.7	70.3	70.3
Fertilizers	32.3	30.8	30.3	31.8	32.3	30.4	29.6	30.6	36.4	42.3	43.2	39.8	35.9	36.7	36.7
Vegetable and animal oils and fats	59.0	62.1	63.4	64.9	58.8	48.7	46.5	48.5	50.5	54.5	57.0	58.2	56.2	55.7	55.7
Other chemicals and allied products	151.3	152.0	153.5	153.6	153.7	150.1	150.1	151.6	151.7	152.0	154.1	152.7	150.5	151.4	151.4
Products of petroleum and coal	242	243	245	241	247	247	246	246	246	246	245	246	250	250	250
Petroleum refining	196.1	195.6	197.3	197.6	199.2	200.2	199.9	198.9	198.0	199.1	198.5	199.6	199.1	180.3	180.3
Coke and byproducts	20.2	20.4	18.7	13.5	19.3	19.5	19.8	20.5	20.7	20.5	20.4	20.5	20.0	18.6	18.6
Other petroleum and coal products	28.2	27.0	28.7	30.1	28.4	27.7	26.3	26.6	27.1	26.1	25.6	25.7	30.8	31.2	31.2
Rubber products	233	234	234	234	209	227	224	230	233	238	243	246	259	270	270
Tires and inner tubes	105.1	104.5	103.5	103.5	82.5	103.5	104.9	110.2	112.2	118.8	113.1	113.9	121.1	132.1	132.1
Rubber footwear	24.9	27.0	27.0	26.4	25.9	25.2	24.9	24.6	25.2	26.2	26.7	27.8	26.6	28.8	28.8
Other rubber products	104.4	102.5	102.4	104.1	100.9	98.3	94.0	95.0	96.9	99.3	103.0	104.6	107.0	106.2	106.2
Leather and leather products	397	382	372	390	395	397	383	380	373	389	399	400	410	409	409
Leather	49.3	49.1	49.7	49.4	49.1	48.3	47.4	49.0	49.1	49.6	51.7	54.2	55.7	55.7	55.7
Footwear (except rubber)	254.5	246.7	232.4	249.2	255.5	250.4	250.9	247.7	240.2	233.1	250.0	259.7	260.0	257.3	257.3
Other leather products	82.8	85.5	90.2	91.2	90.1	89.2	84.3	83.3	85.1	88.7	88.7	95.4	95.5	95.5	95.5
Stone, clay, and glass products	470	469	479	477	478	482	480	469	478	482	484	492	498	514	501
Glass and glass products	121.1	122.7	123.2	123.2	122.7	122.2	116.5	121.1	121.1	121.6	120.0	123.4	126.2	135.9	143.8
Cement, hydraulic	41.8	42.2	40.6	40.5	42.4	42.5	42.7	42.5	42.0	41.8	41.4	41.6	40.9	38.1	38.1
Structural clay products	75.1	77.4	76.6	78.2	79.3	79.1	79.6	80.0	80.1	80.2	80.9	82.0	83.4	76.1	76.1
Pottery and related products	56.4	57.0	57.6	57.0	57.2	55.8	54.9	51.5	55.3	57.4	59.9	61.2	61.4	60.6	60.6
Concrete, gypsum, and plaster products	81.7	83.2	86.1	86.5	87.1	83.8	83.7	83.3	83.6	82.7	82.8	83.1	81.7	81.5	81.5
Other stone, clay, and glass products	93.2	94.2	93.1	92.0	94.6	94.6	94.6	93.3	99.2	101.9	103.5	105.9	102.7	102.7	102.7
Primary metal industries	1,129	1,119	1,110	891	703	1,097	1,092	1,065	1,135	1,158	1,195	1,229	1,245	1,247	1,231
Blast furnaces, steel works, and rolling mills	561.3	577.6	392.3	191.3	572.5	572.0	581.3	599.1	610.8	621.9	628.3	628.9	612.0	580.0	580.0
Iron and steel foundries	198.6	198.5	198.5	198.5	200.5	205.5	204.4	212.3	214.9	227.3	242.4	246.6	259.3	256.8	256.8
Primary smelting and refining of non-ferrous metals	51.3	49.6	46.2	47.9	51.0	50.3	51.5	54.0	54.0	56.1	56.0	55.3	55.6	55.1	55.1
Rolling, drawing, and alloying of non-ferrous metals	80.3	88.1	76.9	85.5	83.0	79.9	78.4	81.1	84.2	88.8	95.3	99.6	103.8	111.5	111.5
Nonferrous foundries	79.0	78.4	74.4	76.3	74.0	71.1	70.5	71.9	73.0	75.4	78.2	80.9	85.5	85.9	85.9
Other primary metal industries	119.2	117.2	105.4	103.5	116.1	113.1	109.3	116.3	119.9	125.7	129.1	131.5	130.7	132.3	132.3
Fabricated metal products (except ordnance, machinery, and transportation equipment)	854	846	841	820	829	868	843	826	836	843	867	890	917	976	995
Tin cans and other tinware	41.1	42.1	43.8	46.4	45.9	49.4	47.7	47.1	44.2	43.8	44.6	44.9	45.7	47.7	47.7
Cutlery, hand tools, and hardware	145.3	142.8	139.1	140.2	137.4	135.2	133.1	133.0	140.7	145.2	148.5	152.8	154.4	156.5	156.5
Heating apparatus (except electric) and plumbers' supplies	133.5	136.8	138.3	141.3	134.6	124.5	117.4	118.6	123.3	129.4	134.5	139.7	165.8	174.3	174.3
Fabricated structural metal products	185.4	186.1	178.9	173.0	202.1	201.8	201.1	202.6	202.3	204.0	206.2	208.5	210.5	215.9	206.7
Metal stamping, coating, and engraving	151.3	146.8	141.6	148.4	151.6	146.6	142.9	149.5	140.2	145.7	151.0	157.1	172.2	180.4	180.4
Other fabricated metal products	189.5	186.1	178.2	179.4	188.2	185.1	184.2	187.3	191.8	199.1	204.6	211.5	219.0	229.1	229.1
Machinery (except electrical)	1,260	1,239	1,229	1,223	1,236	1,229	1,241	1,285	1,327	1,385	1,431	1,458	1,533	1,535	1,535
Engines and turbines	66.6	65.9	64.4	64.5	67.6	66.9	69.0	71.8	75.0	77.5	80.1	81.9	83.8	83.9	83.9
Agricultural machinery and tractors	171.8	168.3	162.7	166.0	178.9	173.4	178.7	182.1	187.1	190.0	192.8	195.8	193.1	178.9	178.9
Construction and mining machinery	91.0	90.3	89.2	90.5	88.8	91.1	95.6	101.9	106.0	111.4	114.8	115.5	122.6	120.2	120.2
Metalworking machinery (except metalworking machinery)	196.4	196.0	198.6	197.9	199.1	197.4	196.2	205.8	212.8	219.3	223.2	228.3	239.5	248.3	248.3
Special-industry machinery (except metalworking machinery)	156.3	156.0	157.0	158.8	161.5	161.8	163.8	169.3	175.6	181.6	188.4	192.0	201.9	204.4	204.4
General industrial machinery	172.6	172.3	172.3	175.9	177.6	177.9	179.7	184.0	189.2	194.5	200.2	204.3	208.8	206.5	206.5
Office and store machines and devices	84.6	86.2	87.5	88.8	88.5	86.8	87.8	89.7	90.5	91.3	97.4	97.1	100.1	108.2	108.2
Service-industry machinery and household machines	155.1	149.0	139.0	136.4	130.2	126.0	124.0	133.2	136.9	138.8	167.0	169.1	191.3	184.8	184.8
Miscellaneous machinery parts	144.2	143.1	138.5	143.7	143.5	141.3	142.2	145.3	153.6	161.1	169.9	176.6	183.4	197.3	197.3
Electrical machinery	779	763	761	750	733	734	712	725	746	770	785	818	869	918	
Electrical generating, transmission, distribution, and industrial apparatus	294.3	293.0	289.2	289.7	286.8	281.9	280.6	284.2	292.9	303.2	310.1	314.8	332.9	343.5	
Electrical equipment for vehicles	63.2	64.9	59.1	65.9	65.4	63.4	62.1	62.0	63.4	64.2	67.2	67.6	69.0	74.3	
Communication equipment	276.8	275.9	275.7	270.1	257.9	250.2	238.7	261.0	266.0	270.7	274.8	291.0	312.2	336.2	
Electrical appliances, lamps, and miscellaneous products	126.8	127.5	125.7	127.0	124.0	116.5	115.4	117.9	123.3	131.7	139.2	144.4	154.8	164.0	

See footnotes at end of table

TABLE A-2: Employees in Nonagricultural Establishments, by Industry Division and Group¹—Con.

[In thousands]

Industry group and industry	1950		1940												Annual average	
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1948	1947	
Manufacturing—Continued																
Transportation equipment	1,129	1,208	1,112	1,112	1,208	1,240	1,224	1,242	1,224	1,183	1,242	1,248	1,248	1,263	1,263	
Automobiles	807.1	765.2	697.1	789.2	810.2	807.0	799.0	775.6	726.9	777.9	775.6	772.6	792.8	776.2		
Aircraft and parts	252.1	252.5	252.3	255.4	258.3	252.2	259.6	253.7	254.1	259.3	259.4	256.0	228.1	228.6		
Aircraft	166.9	167.0	166.8	168.8	171.2	171.7	172.8	169.3	169.8	171.0	171.0	168.9	151.7	151.4		
Aircraft engines and parts	49.9	50.5	51.2	52.1	52.4	46.2	52.3	53.1	53.8	53.0	52.8	52.2	40.7	47.8		
Aircraft propellers and parts	8.1	8.0	8.1	8.2	8.2	8.0	8.2	8.1	7.8	7.7	7.7	7.6	7.4	7.4		
Other aircraft parts and equipment	27.2	27.0	26.2	26.5	26.5	26.5	26.5	26.5	26.5	27.6	27.6	27.3	24.4	22.6		
Ship and boat building and repairing	80.0	82.2	83.3	80.7	88.2	94.6	100.6	103.7	108.2	108.0	113.6	110.4	140.4	159.4		
Ship building and repairing	69.3	72.4	74.8	72.2	77.9	83.3	88.8	91.3	95.1	93.9	100.3	102.2	124.2	137.3		
Railroad equipment	60.7	64.2	65.3	68.2	71.2	59.3	73.9	81.2	83.0	84.6	87.5	88.2	84.8	81.4		
Other transportation equipment	7.7	9.6	11.6	12.0	14.0	10.5	9.3	9.6	10.5	11.1	11.5	11.5	16.6	17.0		
Instruments and related products	235	233	234	234	235	233	230	231	236	238	242	245	246	260	265	
Ophthalmic goods	25.1	25.3	25.6	25.8	26.0	25.2	26.2	27.0	27.3	27.7	28.0	28.1	28.2	30.1		
Photographic apparatus	48.2	48.5	49.1	49.7	49.5	50.1	51.2	53.0	53.8	55.6	56.1	56.7	60.3	61.6		
Watches and clocks	30.2	31.2	31.9	32.0	31.7	30.6	30.4	30.6	31.1	31.6	32.0	30.8	41.3			
Professional and scientific instruments	129.9	128.4	127.7	126.9	125.8	123.3	122.7	125.8	123.0	128.0	129.0	129.4	130.5	131.9		
Miscellaneous manufacturing industries	429	420	436	455	457	439	417	384	403	404	414	426	434	466	461	
Jewelry, silverware, and plated ware	54.3	56.2	57.5	57.2	54.9	52.5	49.0	53.4	54.3	55.7	57.1	58.5	60.3	58.1		
Toys and sporting goods	61.6	66.8	76.4	76.9	72.3	70.3	63.8	65.3	65.6	66.5	66.4	67.0	80.8	80.0		
Costume jewelry, buttons, notions	86.6	90.0	63.5	64.5	69.9	58.1	52.8	51.6	50.1	53.3	57.8	60.0	62.3	61.0		
Other miscellaneous manufacturing industries	247.1	254.8	257.9	258.1	246.5	256.4	218.0	232.6	233.5	238.6	244.9	246.7	262.8	262.3		
Transportation and public utilities	3,835	3,873	3,934	3,871	3,871	3,950	3,909	4,007	4,031	4,031	3,991	3,975	4,024	4,151	4,122	
Transportation	2,650	2,680	2,736	2,680	2,739	2,701	2,800	2,792	2,792	2,795	2,795	2,654	2,684			
Interstate railroads	1,316	1,316	1,281	1,257	1,271	1,275	1,281	1,281	1,287	1,287	1,287	1,287	1,317	1,337		
City railroads	1,148	1,149	1,144	1,090	1,166	1,202	1,208	1,220	1,237	1,237	1,237	1,237	1,239	1,239		
Local railroads and bus lines	153	154	155	156	157	158	158	159	160	161	161	161	163	185		
Trucking and warehousing	544	570	571	568	555	539	537	540	542	542	543	544	566	551		
Other transportation and services	667	670	682	683	682	689	695	691	685	681	677	676	687	692		
Communication	650	660	665	669	676	685	691	691	695	698	700	701	696	646		
Telephone	607.5	611.7	613.5	615.8	624.7	624.7	632.9	638.2	636.6	639.1	641.1	643.5	643.8	634.2	581.1	
Telegraph	47.1	47.7	48.2	49.4	50.1	51.6	52.3	53.1	54.5	55.4	55.3	56.0	60.8	63.4		
Other public utilities	535	537	538	538	544	547	545	540	534	532	530	528	521	492		
Gas and electric utilities	512.1	513.2	513.5	513.7	518.7	521.4	520.0	515.2	509.3	507.0	504.9	504.2	497.0	469.5		
Local utilities	24.9	24.5	24.6	24.7	24.9	25.3	25.0	24.8	24.4	24.8	24.6	24.6	23.4	22.6		
Trade	9,178	9,986	10,154	9,607	9,008	9,409	9,213	9,290	9,336	9,343	9,478	9,310	9,299	9,491	9,196	
Wholesale trade	2,491	2,511	2,540	2,538	2,554	2,538	2,515	2,472	2,491	2,482	2,504	2,522	2,541	2,533	2,410	
Retail trade	6,687	6,755	7,614	7,009	6,951	6,871	6,698	6,748	6,845	6,860	6,974	6,787	6,751	6,958	6,785	
General merchandise stores	1,385	1,419	1,496	1,500	1,489	1,432	1,337	1,356	1,401	1,413	1,515	1,411	1,388	1,470	1,389	
Food and liquor stores	1,198	1,193	1,217	1,208	1,192	1,192	1,181	1,201	1,208	1,203	1,204	1,184	1,184	1,161		
Automotive and accessories dealers	700	700	704	696	692	688	679	670	661	658	647	634	581			
Apparel and accessories stores	490	513	634	560	557	542	486	507	553	564	616	548	534	577	567	
Other retail trade	2,914	2,930	3,054	3,007	3,009	3,013	3,006	3,005	3,013	2,998	2,981	2,987	3,000	3,081	3,088	
Finance	1,750	1,772	1,789	1,768	1,767	1,771	1,780	1,760	1,774	1,768	1,787	1,740	1,735	1,716	1,841	
Banks and trust companies	415	416	415	416	415	422	429	417	413	415	413	413	408	398		
Security dealers and exchanges	36.0	55.4	55.1	55.0	55.5	54.4	55.7	55.3	55.2	55.4	55.4	55.3	57.9	60.		
Insurance carriers and agents	629	626	627	626	627	628	624	616	612	613	611	606	593	549		
Other finance agencies and real estate	672	669	671	672	673	678	686	683	676	667	660	665	655	652		
Service	4,896	4,701	4,737	4,768	4,753	4,833	4,836	4,851	4,854	4,804	4,788	4,790	4,712	4,799	4,786	
Hotels and lodging places	429	443	444	451	475	504	511	487	484	451	445	447	478	497		
Laundries	346.5	246.5	347.5	350.6	355.8	358.0	364.0	361.0	322.6	347.3	346.2	346.4	356.1	364.8		
Cleaning and dyeing plants	140.7	142.6	144.7	147.4	146.9	144.2	150.6	154.1	153.1	149.5	143.5	142.0	149.9	153.7		
Motion pictures	235	238	238	238	238	238	238	239	240	238	237	235	234	232		
Government	5,742	5,777	6,041	5,783	5,866	5,893	5,763	5,738	5,802	5,813	5,775	5,761	5,737	5,613	5,454	
Federal	1,800	1,804	2,101	1,823	1,863	1,892	1,900	1,905	1,909	1,898	1,885	1,877	1,827	1,874		
State and local	3,942	3,973	3,940	3,960	4,003	4,001	3,863	3,833	3,894	3,815	3,860	3,860	3,786	3,680		

¹ The Bureau of Labor Statistics' series of employment in nonagricultural establishments are based upon reports submitted by cooperating establishments and, therefore, differ from employment data obtained from household interviews shown in the Monthly Report on the Labor Force (table A-1). In some important respects, the Bureau of Labor Statistics' data cover all full- and part-time employees in private nonagricultural establishments who worked during, or received pay for, the pay period ending nearest the 15th of the month; in Federal establishments during the pay period ending just before the first of the month; and in State and local government during the pay period ending on or just before the last of the month, while the Monthly Report on the Labor Force data relate to the calendar week which contains the 8th day of the month. Proprietors, self-employed persons, domestic servants, and personnel of the armed forces are excluded from the BLS but not the MRLF series. These employment series have been adjusted to levels indicated by Unemployment Insurance, Arrears and the Bureau of Old-Age and Survivors Insurance data through 1947, and have been

carried forward from 1947 bench-mark levels, thereby providing consistent series. Revised data in all except the first four columns will be identified by asterisks (*).

² Includes ordnance and accessories; lumber, stone, glass products (except furniture); furniture and fixtures; stone, clay, and glass products; primary metal industries; fabricated metal products (except ordnance, machinery, and transportation equipment); machinery (except electrical); electrical machinery; transportation equipment; instruments and related products; and miscellaneous manufacturing industries.

³ Includes food and kindred products; tobacco manufactures; textile-mill products; apparel and other finished textile products; paper and allied products; printing, publishing, and allied industries; chemicals and allied products; products of petroleum and coal; rubber products; and leather and leather products.

⁴ Data by region, from January 1940, are available upon request to the Bureau of Labor Statistics.

TABLE A-3: Production Workers in Mining and Manufacturing Industries¹

[In thousands]

Industry group and industry	1949												Annual average		
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1948	1947
Mining:															
Metal:	80.4	81.0	72.6	54.1	80.9	82.8	83.3	89.5	90.9	92.7	92.0	91.0	88.6	87.5	
Iron	29.7	30.3	24.7	6.0	32.2	32.6	32.8	33.4	33.1	33.2	32.0	32.0	32.6	30.5	
Copper	19.3	19.2	18.8	18.8	18.6	18.6	18.8	19.8	20.5	20.9	21.2	20.2	20.0	20.1	
Lead and zinc	15.9	16.1	15.0	14.7	15.6	16.5	16.1	19.1	19.8	21.0	21.1	21.0	19.2	20.7	
Anthracite	71.1	71.8	72.1	71.6	71.1	71.0	72.7	72.9	73.9	74.3	75.1	75.8	74.6		
Bituminous-coal	323.1	307.5	380.7	77.0	395.0	399.7	383.1	404.5	411.7	419.6	421.6	428.2	419.1	407.7	
Crude petroleum and natural gas production:															
Petroleum and natural gas production	123.2	124.2	124.7	126.1	128.7	131.6	131.1	130.0	126.5	125.7	125.7	125.9	127.1	120.0	
Nonmetallic mining and quarrying	76.4	80.1	82.8	83.2	85.8	86.0	85.8	85.9	85.6	85.4	82.0	80.4	87.6	86.0	
Manufacturing:	11,475	11,466	11,500	11,289	11,368	11,773	11,661	11,911	11,337	11,394	11,616	11,954	12,074	12,717	12,794
Durable goods	5,995	6,007	5,937	5,719	5,651	6,080	5,947	5,994	6,022	6,057	6,202	6,417	6,523	6,909	7,010
Nondurable goods	5,480	5,433	5,545	5,570	5,717	5,614	5,317	5,315	5,367	5,354	5,487	5,851	5,888	5,784	
Ordnance and accessories	17.1	16.9	17.1	17.3	18.1	18.2	18.2	19.3	20.7	21.3	22.5	23.2	23.3	23.9	22.5
Food and kindred products	1,064	1,078	1,139	1,185	1,273	1,340	1,350	1,224	1,153	1,095	1,071	1,069	1,073	1,197	1,216
Meat products	244.3	231.2	242.2	236.0	230.4	228.5	227.2	225.6	220.6	217.4	225.5	230.9	215.8	223.9	
Dairy products	95.0	90.2	98.9	104.0	110.4	116.3	122.1	121.1	115.3	107.8	103.3	100.0	111.0	115.2	
Canning and preserving	116.5	135.6	159.8	232.2	321.5	329.1	230.1	169.0	130.9	125.0	108.9	108.3	195.3	198.2	
Grain-mill products	93.6	95.3	96.9	103.3	96.0	96.8	94.3	93.8	91.5	93.0	93.4	93.6	94.1		
Bakery products	156.0	149.0	167.7	199.4	199.6	199.6	191.1	191.1	187.8	186.0	184.0	184.6	195.5	194.0	
Sugar	24.1	38.0	44.7	43.5	26.7	23.7	22.8	22.8	22.9	22.7	22.7	22.7	22.9	22.9	
Confectionery and related products	81.7	90.1	95.3	96.0	91.5	78.7	69.9	71.1	73.6	77.7	79.3	82.4	83.9	84.0	
Beverages	134.8	141.4	146.2	149.2	157.3	164.7	168.5	152.4	148.0	140.1	149.4	144.5	161.4	161.1	
Miscellaneous food products	97.8	101.2	106.1	109.9	107.8	105.8	105.2	104.0	102.7	100.2	101.2	108.1	108.1	111.3	
Tobacco manufactures	81	85	87	89	92	91	91	82	84	82	82	85	88	93	96
Cigarettes	23.8	24.3	24.4	24.4	24.5	24.4	24.4	24.3	24.3	23.8	23.5	23.4	24.3	23.8	
Cigars	40.5	41.2	43.6	43.6	43.1	42.3	40.9	42.4	41.3	40.9	43.3	43.6	46.2	47.2	
Tobacco and snuff	11.3	11.5	11.4	11.7	11.6	11.7	11.0	11.4	11.0	11.3	11.6	11.9	12.2	13.0	
Tobacco stemming and redrying	9.7	9.5	9.2	11.9	14.9	12.0	5.7	5.6	5.8	6.4	6.8	9.1	10.2	12.1	
Textile-mill products	1,182	1,176	1,187	1,184	1,168	1,137	1,002	1,058	1,083	1,087	1,100	1,150	1,190	1,275	1,243
Yarn and thread mills	148.5	148.5	147.0	144.4	139.5	133.0	126.6	131.9	132.6	133.7	143.6	149.9	168.5	170.6	
Broad-woven fabric mills	567.1	573.8	571.8	564.5	547.0	530.1	518.0	524.7	526.4	529.5	558.5	582.1	615.3	560.2	
Knitting mills	222.7	226.6	229.7	226.7	219.2	210.8	199.7	202.9	202.3	206.8	210.5	213.9	214.3	226.2	
Dyeing and finishing textiles	79.8	80.5	80.0	78.0	76.0	73.2	71.9	74.0	76.2	77.7	78.3	78.9	80.4	78.3	
Carpets, rugs, other floor coverings	51.8	51.3	50.4	49.7	48.1	47.5	43.5	49.2	60.8	63.9	55.8	56.9	57.2	56.5	
Other textile-mill products	105.8	105.7	105.2	105.1	102.6	97.7	97.9	100.5	98.9	98.5	103.9	108.5	121.7	127.2	
Apparel and other finished textile products	1,009	1,036	1,042	1,028	1,083	1,082	1,040	942	959	956	1,008	1,051	1,055	1,049	1,028
Men's and boys' suits and coats	129.0	126.7	117.6	128.6	133.4	130.6	115.9	121.5	117.7	137.3	137.3	138.7	140.1	138.4	
Men's and boys' furnishings and work clothing	243.0	247.9	251.3	252.4	246.2	235.4	221.4	236.3	239.1	241.0	242.0	246.6	250.7	252.3	
Women's outerwear	305.6	296.5	279.5	308.3	318.5	306.3	263.3	257.6	257.0	288.5	317.7	324.1	305.7	305.4	
Women's, children's undergarments	93.1	94.6	98.2	97.5	94.1	88.6	81.7	83.5	84.5	85.5	87.7	89.0	88.7	83.3	
Millinery	22.0	20.0	15.6	20.9	21.2	20.3	17.7	14.7	17.6	20.5	22.6	22.6	21.2	21.1	
Children's outerwear	59.9	58.7	60.1	62.8	62.3	61.9	58.4	57.3	52.4	53.4	57.7	57.0	54.7	49.1	
Fur goods and miscellaneous apparel	68.7	79.2	84.2	86.4	83.8	79.3	72.9	74.5	71.8	71.1	72.8	72.5	78.5	73.0	
Other fabricated textile products	117.1	118.8	121.6	120.1	117.8	110.8	113.9	115.4	113.8	112.7	110.7	107.8	105.5		
Lumber and wood products (except furniture)	636	642	683	692	680	684	688	676	686	672	650	659	655	732	777
Logging camps and contractors	40.2	57.2	59.6	59.8	55.3	58.6	58.7	60.1	59.7	54.5	56.5	55.4	60.5	77.7	
Sawmills and planing mills	281.0	403.8	412.6	413.8	416.0	414.5	407.1	410.3	398.5	388.6	384.8	379.5	442.0	455.4	
Millwork, plywood, and prefabricated structural wood products	101.5	101.9	100.7	98.1	95.4	94.6	91.9	93.7	91.9	93.6	93.5	95.3	105.0	100.0	
Wooden containers	67.6	68.3	67.4	68.8	66.4	66.6	66.3	68.5	68.4	68.3	68.2	68.8	76.0	81.8	
Miscellaneous wood products	51.3	51.5	51.4	50.9	51.0	52.1	51.9	53.0	53.3	54.2	55.5	56.2	59.2	62.4	
Furniture and fixtures	295	289	283	284	277	263	253	257	259	268	274	278	306	300	
Household furniture	211.7	211.0	205.5	205.6	198.8	187.0	179.3	181.1	183.0	190.5	194.7	198.3	221.6	219.7	
Other furniture and fixtures	77.1	78.0	76.6	78.3	77.7	75.8	74.1	75.9	76.4	77.4	78.9	80.0	84.1	80.0	

See footnote at end of table.

TABLE A-3: Production Workers in Mining and Manufacturing Industries¹—Continued

[In thousands]

Industry group and industry	1950			1949										Annual average	
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1948	1947
Manufacturing—Continued															
Paper and allied products	384	385	390	393	392	384	371	365	369	372	377	386	391	405	405
Pulp, paper, and paperboard mills	199.2	200.1	206.6	199.6	197.0	190.5	188.2	191.7	193.6	196.3	201.4	204.2	210.8	206.9	
Paperboard containers and boxes	101.0	105.1	107.7	103.6	101.9	97.4	93.3	94.2	94.3	95.6	97.7	99.1	104.6	107.4	
Other paper and allied products	84.3	84.8	84.8	85.8	84.8	83.4	83.1	82.3	84.2	84.7	86.8	87.0	89.4	91.1	
Printing, publishing, and allied industries	459	494	502	500	500	495	496	485	494	494	495	496	497	501	497
Newspapers	143.2	145.7	145.0	144.4	145.8	141.4	140.9	141.9	141.0	139.5	138.8	136.7	133.5	125.4	
Periodicals	34.5	34.8	35.0	35.7	35.8	35.6	35.2	35.0	36.6	36.9	37.4	37.1	37.3	38.7	
Books	35.1	36.0	36.5	36.5	36.3	35.9	35.8	37.1	37.2	37.2	37.8	37.6	38.6	40.4	
Commercial printing	166.8	167.9	165.1	166.1	162.4	160.7	162.4	163.8	162.3	163.1	163.7	166.4	165.5	161.0	
Lithographing	30.5	32.6	32.8	32.5	31.8	31.2	30.8	31.1	31.5	32.3	32.1	31.6	33.1	38.2	
Other printing and publishing	83.8	85.1	85.3	85.0	84.5	83.5	82.1	85.4	85.5	86.2	87.4	91.0	93.2		
Chemicals and allied products	485	480	485	485	478	458	453	464	476	465	511	513	520	523	
Industrial inorganic chemicals	50.6	51.3	51.2	51.5	49.9	49.8	49.8	50.7	52.3	52.6	54.6	55.0	54.7	51.9	
Industrial organic chemicals	143.7	145.7	142.9	141.4	139.8	138.2	138.8	140.1	141.8	142.1	157.4	161.7	164.6	162.6	
Drugs and medicines	61.7	61.9	61.5	61.6	60.7	60.2	59.2	59.9	59.8	60.5	61.5	61.5	63.0		
Paints, pigments, and fillers	43.5	43.6	43.8	43.9	42.3	41.8	41.0	42.6	43.7	44.0	44.6	45.9	45.9		
Fertilizers	26.3	24.9	24.9	26.1	26.6	24.7	24.0	24.9	24.0	23.6	27.6	33.1	31.4		
Vegetable and animal oils and fats	48.8	51.9	53.1	54.6	49.1	48.5	38.5	38.7	40.4	44.4	47.1	48.1	46.6	46.9	
Other chemicals and allied products	105.5	106.2	108.2	109.2	109.1	108.0	103.7	106.3	107.3	108.7	109.5	106.7	117.6	120.7	
Products of petroleum and coal	183	184	185	188	185	190	190	189	188	188	187	188	192	184	
Petroleum refining	145.3	145.7	147.6	148.4	149.2	149.9	150.3	149.6	148.5	148.5	149.3	149.5	148.9	141.5	
Coke and byproducts	17.4	17.6	15.9	16.9	16.7	17.0	17.3	18.0	18.1	17.9	17.9	17.8	17.5	15.9	
Other petroleum and coal products	21.3	22.1	24.1	23.3	23.5	22.9	21.4	21.6	21.8	20.9	20.2	20.2	23.3	26.3	
Rubber products	185	187	186	187	167	180	177	181	185	190	194	197	209	220	
Tires and inner tubes	82.6	82.1	81.3	81.1	84.3	80.9	82.0	80.3	87.2	88.6	88.6	89.4	96.2	105.8	
Rubber footwear	20.1	22.1	22.2	21.5	21.1	20.3	20.2	19.8	20.5	21.4	21.9	22.9	24.6	23.9	
Other rubber products	84.2	82.7	82.8	84.4	81.4	78.6	74.5	75.3	77.2	76.8	83.1	85.1	88.1	89.9	
Leather and leather products	358	348	342	332	340	354	356	342	339	333	348	358	359	368	372
Leather	44.9	45.0	45.2	44.9	44.6	44.3	43.1	44.5	44.5	45.0	46.3	47.1	49.5	51.5	
Footwear (except rubber)	231.6	223.3	208.0	224.3	230.2	234.2	226.3	222.5	215.7	227.8	234.4	234.5	234.8	235.5	
Other leather products	71.3	74.1	78.5	76.4	78.5	77.6	73.0	72.1	72.2	74.9	77.4	77.3	83.5	84.8	
Stone, clay, and glass products	403	403	412	411	411	412	412	400	409	414	416	423	429	448	438
Glass and glass products	108.7	107.2	107.7	107.5	106.9	106.6	101.1	105.4	105.9	104.5	107.4	109.5	119.6	126.9	
Cement, hydraulic	33.8	36.4	34.8	34.8	36.5	36.7	36.9	36.6	36.2	36.0	35.7	35.8	35.5	33.0	
Structural clay products	68.4	70.5	69.7	71.0	72.1	72.1	72.1	72.8	72.8	72.9	73.4	74.5	76.5	70.2	
Pottery and related products	51.0	51.6	52.2	51.7	50.4	49.7	46.3	50.2	52.3	54.6	55.7	56.1	55.5	54.1	
Concrete, gypsum, and plaster products	69.5	73.0	73.9	74.6	74.9	73.5	71.5	72.1	71.2	70.3	70.7	71.1	76.4	71.5	
Other stone, clay, and glass products	72.5	73.7	72.5	71.1	72.9	72.9	72.1	73.2	75.7	77.5	80.5	81.0	84.6	82.4	
Primary metal industries	969	960	952	743	559	638	632	934	971	991	1,028	1,062	1,077	1,083	1,072
Blast furnaces, steel works, and rolling mills	508.1	504.2	324.8	130.3	498.7	497.6	505.8	523.0	533.9	545.4	551.7	552.8	536.8	517.6	
Iron and steel foundries	172.2	172.1	169.4	171.9	173.4	177.3	175.9	184.0	186.3	188.4	213.5	219.2	230.9	229.4	
Primary smelting and refining of non-ferrous metals	42.8	41.2	38.3	39.4	41.8	41.4	42.3	44.9	45.4	46.8	46.6	45.8	46.8	46.9	
Rolling, drawing, and alloying of non-ferrous metals	73.6	72.8	62.6	70.0	67.2	63.8	62.4	64.4	67.3	71.4	77.9	82.3	86.0	93.3	
Nonferrous foundries	65.9	65.9	62.4	64.1	62.0	59.1	58.7	59.5	59.9	62.2	65.3	68.2	73.2	74.4	
Other primary metal industries	97.7	95.9	85.0	83.5	95.1	92.4	88.4	93.2	98.2	103.9	107.3	109.0	109.1	111.3	
Fabricated metal products (except ordnance, machinery, and transportation equipment)	701	693	688	666	677	708	688	671	679	683	706	729	752	812	837
Tin cans and other tinware	35.9	36.6	38.2	40.6	43.2	43.6	41.8	41.0	38.8	37.9	38.5	38.7	42.2	41.0	
Cutlery, hand tools, and hardware	121.0	119.2	115.6	116.3	113.7	111.4	109.2	113.8	116.7	120.6	124.7	128.4	131.6	134.8	
Heating apparatus (except electric) and plumbers' supplies	107.7	111.3	113.0	116.2	109.6	97.1	91.8	93.6	97.2	103.0	107.8	112.3	137.1	146.0	
Fabricated structural metal products	141.1	142.1	133.6	129.0	155.8	153.4	155.0	156.0	155.8	157.3	159.9	162.6	165.7	164.6	
Metal stamping, coating, and engraving	129.7	125.1	119.8	127.2	129.8	124.9	121.5	120.7	117.9	123.3	128.4	134.3	148.6	156.3	
Other fabricated metal products	157.5	153.7	145.8	148.0	156.1	152.5	151.5	154.3	157.3	164.0	169.7	176.2	183.8	193.9	
Machinery (except electrical)	957	936	929	908	922	935	927	939	977	1,014	1,066	1,108	1,131	1,203	1,217
Engines and turbines	48.8	48.0	48.4	46.7	49.3	49.0	50.7	53.2	56.4	58.7	60.9	61.9	63.9	65.3	
Agricultural machinery and tractors	133.5	130.6	125.0	127.8	139.9	140.4	139.8	145.2	148.0	150.5	152.8	153.7	151.7	140.3	
Construction and mining machinery	64.3	63.7	62.3	63.7	62.3	64.2	67.7	72.5	76.0	80.3	83.6	83.3	91.1	90.4	
Metalworking machinery	146.5	146.4	145.9	148.0	149.1	146.9	149.5	155.8	161.1	167.1	171.2	174.5	186.6	196.1	
Special industry machinery (except metalworking machinery)	116.8	117.3	117.4	119.3	121.8	122.6	124.0	129.2	134.9	140.2	146.0	149.0	158.6	163.0	
General industrial machinery	120.1	121.1	121.2	123.3	124.8	124.5	125.3	129.3	131.4	139.0	144.5	148.7	154.3	156.4	
Office and store machines and devices	70.0	71.2	72.2	73.5	73.3	71.7	72.5	74.7	75.3	76.1	79.4	81.6	93.0	92.4	
Service-industry and household machines	123.8	118.9	109.1	107.9	101.9	98.3	98.5	104.5	107.5	127.2	134.6	136.7	156.3	152.2	
Miscellaneous machinery parts	112.6	111.8	106.8	112.2	112.1	109.8	110.6	112.6	120.6	127.3	135.3	141.1	147.5	161.0	

See footnote at end of table.

TABLE A-3: Production Workers in Mining and Manufacturing Industries¹—Continued
(In thousands)

Industry group and industry	1950						1949						Annual average		
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1948	1947
Manufacturing—Continued															
Electrical machinery	576	560	558	546	545	531	507	505	515	538	560	585	607	656	706
Electrical generating, transmission, distribution, and industrial apparatus	206.3	206.6	202.4	202.8	200.8	196.6	200.1	200.1	210.5	227.0	222.7	251.4	252.7		
Electrical equipment for vehicles	50.4	49.8	43.8	50.5	49.6	47.0	45.8	46.3	48.1	49.1	52.0	52.6	54.6	59.7	
Communication equipment	202.0	200.6	200.4	193.4	182.4	173.4	175.5	181.4	185.4	188.7	195.7	207.2	224.4	249.1	
Electrical appliances, lamps, and miscellaneous products	100.9	101.0	99.3	101.0	97.9	96.1	88.4	90.6	95.1	103.0	110.1	114.6	125.5	134.8	
Transportation equipment	914	990	896	898	1,017	998	1,014	995	955	1,012	1,017	1,021	1,031	1,038	
Automobiles	686.8	585.1	582.1	666.1	686.3	686.0	646.5	646.1	600.5	648.8	646.1	648.9	657.6	648.8	
Aircraft and parts	184.7	184.0	185.7	187.9	190.7	185.3	192.4	187.1	186.8	192.1	192.4	190.0	196.6	167.2	
Aircraft	123.0	122.7	122.3	125.4	127.6	128.6	129.5	127.2	128.7	128.0	128.2	126.6	111.5	110.9	
Aircraft engines and parts	35.9	36.0	36.7	37.6	37.9	31.9	37.9	38.5	39.0	38.6	38.4	37.9	33.6	35.0	
Aircraft propellers and parts	5.4	5.4	5.4	5.5	5.5	5.2	5.5	5.4	5.2	5.1	5.1	5.0	4.9	4.9	
Other aircraft parts and equipment	20.4	19.9	19.3	19.4	19.7	19.6	19.5	16.0	15.6	20.4	20.7	20.4	16.6	16.4	
Ship and boat building and repairing	66.4	69.1	71.3	68.5	74.0	79.5	85.5	88.2	92.3	93.0	97.6	100.1	123.2	140.6	
Ship building and repairing	57.7	60.6	62.8	69.2	65.4	70.4	75.7	77.8	81.3	82.0	86.4	88.2	109.3	121.7	
Railroad equipment	46.1	49.9	50.6	53.2	56.2	46.5	58.5	55.6	67.4	68.8	71.5	72.1	69.6	66.6	
Other transportation equipment	6.1	8.1	10.1	10.5	9.9	8.8	7.7	7.8	8.7	9.1	9.5	9.6	14.5	15.1	
Instruments and related products	173	172	173	174	174	172	169	170	176	177	181	183	185	200	207
Ophthalmic goods	20.3	20.5	20.8	20.8	21.0	21.1	21.2	22.1	22.5	22.9	23.1	23.3	23.8	25.8	
Photographic apparatus	34.7	33.2	35.3	35.8	35.3	35.3	38.0	37.5	38.7	39.5	41.2	41.3	42.0	45.4	46.5
Watches and clocks	25.4	26.5	27.2	27.6	27.1	28.0	25.0	26.0	26.0	26.2	26.4	26.7	35.0	35.7	
Professional and scientific instruments	91.3	90.9	90.3	89.4	88.3	86.3	86.7	88.7	89.4	90.5	91.8	93.4	93.4	99.1	
Miscellaneous manufacturing industries	354	345	360	381	383	366	347	313	333	333	343	354	363	394	394
Jewelry, silverware, and plated ware	43.9	45.6	46.8	46.8	44.6	42.2	39.1	43.1	43.9	45.2	46.5	47.8	49.6	47.9	
Toys and sporting goods	52.0	57.3	67.3	67.8	63.4	61.3	54.9	56.6	58.8	58.0	57.8	58.1	71.5	71.5	
Costume jewelry, buttons, notions	46.8	47.8	53.1	53.8	52.2	48.5	43.8	42.3	41.0	44.1	48.6	51.9	53.9	53.8	
Other miscellaneous manufacturing industries	202.6	209.7	213.8	214.5	205.5	194.5	175.2	190.5	191.8	195.9	201.3	204.9	219.4	220.9	

¹ Data are based upon reports from cooperating establishments covering both full- and part-time production and related workers who worked during, or received pay for, the pay period ending nearest the 15th of the month. Data have been adjusted to levels indicated by Unemployment Insurance Agencies and the Bureau of Old-Age and Survivors' Insurance data through 1947 and have been carried forward from 1947 bench-mark levels, thereby

providing consistent series. Comparable data from January 1947 are available upon request to the Bureau of Labor Statistics. Such requests should specify the series for which data are desired. Revised data in all except the first four columns will be identified by an asterisk for the first month's publication of such data.

TABLE A-4: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries¹

[1939 average = 100]

Period	Employ- ment	Weekly pay roll	Period	Employ- ment	Weekly pay roll	Period	Employ- ment	Weekly pay roll
1939: Average	100.0	100.0	1947: Average	156.2	326.9	1949: August	141.1	323.0
1940: Average	107.5	113.8	1948: Average	155.2	351.4	September	143.7	330.1
1941: Average	132.8	164.9	1949: February	147.4	340.4	October	138.8	329.9
1942: Average	156.9	241.5	March	145.3	332.8	November	137.8	313.9
1943: Average	183.3	331.1	April	141.8	319.2	December	140.4	330.1
1944: Average	178.3	343.7	May	138.2	312.8	1950: January	139.9	329.7
1945: Average	157.0	263.5	June	138.4	315.7	February	140.1	—
1946: Average	147.8	271.1	July	136.9	312.8			

¹ See footnote 1, table A-3.

TABLE A-5: Federal Civilian Employment by Branch and Agency Group

Year and month	All branches	Executive ¹				Legislative	Judicial
		Total	Defense agencies ²	Post Office Department	All other agencies		
Total (including areas outside continental United States)							
1947	2,153,170	2,142,825	989,659	455,002	698,164	7,127	3,218
1948	2,066,132	2,055,397	916,338	470,975	668,064	7,273	3,482
1949: February	2,080,040	2,078,066	935,216	475,022	667,830	7,420	3,562
March	2,084,808	2,078,766	934,433	474,945	669,388	7,482	3,558
April	2,093,814	2,084,764	934,969	476,440	673,358	7,478	3,572
May	2,106,927	2,095,881	935,960	478,729	690,130	7,480	3,568
June	2,114,377	2,099,698	934,661	482,147	696,390	7,498	3,571
July	2,126,249	2,095,556	917,401	483,198	692,959	7,507	3,579
August	2,094,877	2,083,448	902,401	491,408	689,539	7,843	3,587
September	2,081,798	2,070,289	886,890	494,087	689,262	7,924	3,600
October	2,047,312	2,033,748	865,288	496,038	679,424	7,937	3,627
November	1,999,681	1,988,079	814,948	497,814	875,417	7,992	3,610
December	2,288,367	2,276,635	799,888	804,038	872,700	7,954	3,778
1950: January	1,976,093	1,964,246	791,048	503,106	670,092	8,063	3,784
February	1,970,815	1,959,063	782,788	503,815	672,460	7,986	3,766
Continental United States							
1947	1,893,875	1,883,600	766,854	453,435	665,321	7,127	3,145
1948	1,846,840	1,836,158	734,484	469,279	632,395	7,273	3,409
1949: February	1,897,665	1,886,769	781,956	473,289	631,524	7,420	3,476
March	1,897,224	1,886,281	780,732	473,215	632,264	7,482	3,481
April	1,905,131	1,894,588	784,077	474,679	635,402	7,478	3,485
May	1,918,278	1,907,309	787,045	477,140	642,738	7,490	3,490
June	1,929,461	1,918,469	790,087	481,651	647,731	7,498	3,494
July	1,925,251	1,914,342	777,454	483,300	653,396	7,507	3,502
August	1,930,248	1,906,896	770,034	489,562	649,300	7,843	3,510
September	1,912,227	1,900,780	760,059	492,227	648,494	7,924	3,523
October	1,882,859	1,871,372	738,195	494,178	638,996	7,937	3,550
November	1,843,246	1,831,721	700,274	495,963	635,384	7,992	3,533
December	2,134,592	2,122,937	688,599	801,008	633,330	7,954	3,701
1950: January	1,825,245	1,813,475	683,018	501,257	629,200	8,063	3,707
February	1,820,625	1,808,950	675,316	501,969	631,665	7,986	3,680

¹ Includes Government corporations (including Federal Reserve Banks and mixed-ownership banks of the Farm Credit Administration) and other activities performed by Government personnel in establishments such as navy yards, arsenals, hospitals, and force-account construction. Data, which are based mainly on reports to the Civil Service Commission, are adjusted to maintain continuity of coverage and definition with information for former periods.

² Covers civilian employees of the Department of Defense (Secretary of Defense, Army, Air Force, and Navy), Maritime Commission, National Advisory Committee for Aeronautics, the Panama Canal, Philippine Alien Property Administration, Philippine War Damage Commission, Selective Service System, National Security Resources Board, National Security Council War Claims Commission.

TABLE A-6: Federal Civilian Pay Rolls by Branch and Agency Group

[In thousands]

Year and month	All branches	Executive ¹				Legislative	Judicial
		Total	Defense agencies ²	Post Office Department	All other agencies		
Total (including areas outside continental United States)							
1947	\$5,966,107	\$5,922,339	\$2,646,913	\$1,205,051	\$2,070,375	\$29,074	\$14,694
1948	6,225,466	6,176,414	2,660,770	1,399,072	2,116,572	30,891	16,181
1949: February	514,821	514,865	220,788	120,505	173,572	2,650	1,306
March	576,546	572,328	250,618	124,948	196,762	2,763	1,455
April	546,000	541,967	223,826	124,576	183,565	2,722	1,311
May	562,080	557,889	242,059	122,930	192,900	2,762	1,429
June	574,900	570,757	247,993	124,673	198,001	2,792	1,441
July	540,440	536,210	223,458	124,914	187,838	2,884	1,346
August	574,046	569,536	230,178	125,704	204,564	3,005	1,508
September	557,435	553,011	230,016	125,064	197,931	2,968	1,457
October	539,248	534,992	222,221	125,164	187,607	2,936	1,320
November	557,296	562,539	230,206	131,577	200,756	3,137	1,620
December	610,344	605,564	218,404	186,462	200,698	3,160	1,620
1950: January	553,090	548,372	214,670	132,177	201,525	3,148	1,570
February	517,739	513,223	195,609	132,293	185,321	3,083	1,453
Continental United States							
1947	\$5,463,671	\$5,420,337	\$2,234,417	\$1,200,943	\$1,984,977	\$29,074	\$14,260
1948	5,751,115	5,684,494	2,272,001	1,394,037	2,018,456	30,891	15,730
1949: February	481,725	477,807	192,441	120,067	165,299	2,650	1,268
March	534,633	530,456	218,474	124,689	187,493	2,763	1,414
April	504,901	500,907	202,696	124,114	174,094	2,722	1,272
May	522,002	517,853	212,447	122,474	182,932	2,762	1,387
June	533,002	528,810	216,532	124,210	188,068	2,792	1,400
July	500,642	496,451	194,463	124,446	177,542	2,884	1,307
August	532,977	528,500	209,583	125,321	193,605	3,005	1,463
September	518,493	514,106	202,222	124,598	187,291	2,968	1,416
October	501,648	497,431	195,446	124,700	177,285	2,936	1,281
November	523,694	518,979	196,868	131,088	191,023	3,137	1,578
December	573,588	568,849	193,321	185,796	189,732	3,160	1,579
1950: January	516,707	512,032	180,825	131,669	189,843	3,148	1,570
February	484,548	480,068	173,101	131,785	175,182	3,083	1,393

¹ See footnote 1, table A-5.² See footnote 2, table A-5.

TABLE A-7: Civilian Government Employment and Pay Rolls in Washington, D. C.,¹ by Branch and Agency Group

Year and month	Total government	District of Columbia government	Federal						
			Total	Executive ²			Legislative	Judicial	
				All agencies	Defense agencies ³	Post Office Department			
Employment									
1947	233,667	18,140	215,527	207,824	69,771	7,645	120,408	7,127	576
1948	231,239	18,774	212,465	204,601	68,409	7,826	128,266	7,273	591
1949: February	238,911	19,064	219,847	211,823	71,723	7,613	132,487	7,420	604
March	239,898	19,095	220,803	212,719	71,961	7,625	133,103	7,482	602
April	241,442	19,358	222,084	214,004	72,359	7,750	133,895	7,478	602
May	242,370	19,144	223,226	215,133	72,545	7,755	134,833	7,480	613
June	243,896	19,767	224,129	216,019	72,440	7,749	135,820	7,498	612
July	245,067	19,708	225,359	217,237	72,521	7,770	136,946	7,507	615
August	245,758	19,746	226,576	216,766	71,246	7,784	137,516	7,542	619
September	242,429	18,416	223,010	214,470	69,448	7,773	137,246	7,924	616
October	240,826	19,304	221,382	212,828	68,769	7,749	137,910	7,937	617
November	240,095	20,420	219,675	211,064	66,121	7,861	137,053	7,992	619
December	244,467	20,031	224,436	215,840	65,860	12,888	137,062	7,954	642
1950: January	242,030	20,110	221,920	213,201	68,794	7,859	136,548	8,063	656
February	241,717	20,163	221,554	212,903	68,542	7,643	136,718	7,986	655
Pay rolls (in thousands)									
1947	\$767,770	\$49,455	\$718,315	\$686,796	\$217,337	\$29,562	\$439,897	\$29,074	\$2,445
1948	817,554	54,248	763,306	729,791	233,589	31,268	464,904	30,891	2,634
1949: February	69,096	4,418	64,678	61,810	19,984	2,567	39,226	2,650	218
March	77,819	4,801	73,018	70,011	22,190	2,721	45,100	2,763	244
April	72,228	4,577	67,651	64,703	20,491	2,642	41,570	2,722	225
May	74,803	4,676	70,127	67,128	21,020	2,670	45,438	2,762	237
June	74,475	4,748	69,727	66,690	20,080	2,678	45,938	2,779	240
July	73,766	5,775	68,911	65,793	21,238	2,691	41,864	2,684	224
August	80,173	4,455	75,829	72,753	22,551	2,620	46,122	3,005	250
September	75,049	5,379	71,661	68,457	22,921	2,737	44,760	2,968	236
October	73,815	5,187	68,628	65,458	20,137	2,685	42,656	2,936	224
November	79,552	5,526	74,026	70,621	21,561	2,509	46,251	3,137	268
December	80,004	5,503	74,501	71,068	21,274	2,829	43,965	3,160	273
1950: January	80,747	5,531	75,216	71,787	22,673	2,868	46,246	3,148	261
February	73,484	5,246	66,238	64,900	19,912	2,867	42,121	3,083	255

¹ Data for the executive branch cover, in addition to the area inside the District of Columbia, the adjacent sections of Maryland and Virginia which are defined by the Bureau of the Census as in the metropolitan area.

² See footnote 1, table A-5.

³ See footnote 2, table A-5.

TABLE A-8: Personnel and Pay of the Military Branch of the Federal Government

[In thousands]

Year and month	Personnel (average for year or as of first of month) ¹						Pay (for entire month—all types)					
	Total	Army	Air Force	Navy	Marine Corps	Coast Guard	Total	Army	Air Force	Navy	Marine Corps	Coast Guard
1947	1,671	1,059	(7)	494	98	20	\$5,350,395	\$3,461,932	(7)	\$1,501,897	\$239,469	\$87,458
1948	1,492	964	(7)	424	84	20	3,442,962	\$2,136,584	(7)	1,077,694	173,368	55,516
1949: February	1,688	712	416	450	88	22	200,042	187,813	(7)	84,201	13,591	4,437
March	1,682	703	417	451	89	22	208,063	188,587	(7)	81,204	14,525	4,747
April	1,667	689	417	450	88	23	202,446	185,607	(7)	87,610	14,379	4,850
May	1,650	673	418	449	87	23	204,790	181,962	(7)	83,572	14,318	4,938
June	1,639	664	418	447	87	23	201,583	186,302	(7)	86,707	13,655	4,920
July	1,638	659	419	450	86	24	202,994	113,244	477,176	92,881	14,660	4,833
August	1,638	655	423	451	86	24	206,893	112,192	78,881	87,722	15,011	5,087
September	1,630	656	420	444	86	24	204,426	116,312	78,679	88,911	15,221	5,303
October	1,614	656	418	432	84	24	201,472	123,001	89,342	98,199	15,575	5,355
November	1,605	657	417	425	83	23	208,637	123,380	88,346	96,381	15,192	5,338
December	1,600	658	416	420	82	24	204,301	124,965	92,455	94,673	16,652	5,536
1950: January	1,573	639	413	416	81	24	227,527	120,331	87,414	90,160	14,997	5,616
February	1,534	613	415	402	80	24	217,979	118,530	87,344	90,802	15,625	5,678

¹ Represents persons on active duty as of the first of the month. Reserve personnel are excluded if on inactive duty or if on active duty for only a brief training or emergency period. Persons on terminal leave were included through October 1947. Data for Army include Philippine Scouts.

² Separate figures for Army and Air Force not available. Combined data shown under Army.

TABLE A-11: Insured Unemployment Under State Unemployment Insurance Programs,¹ by Geographic Division and State

[In thousands]

Geographic division and State	1950		1949											1948	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Jan.	
Continental U. S.	2,380.9	2,200.0	2,019.9	1,855.7	1,885.6	2,140.4	2,111.2	2,062.1	2,035.1	1,967.8	1,939.9	1,835.8	1,586.2	979.7	
New England	202.8	191.2	180.9	174.9	207.9	269.9	281.4	303.4	306.3	258.1	199.1	180.3	163.8	88.0	
Maine	21.8	20.9	16.9	11.2	12.0	16.7	16.6	19.0	21.8	19.4	15.0	14.4	13.1	8.2	
New Hampshire	13.1	12.9	12.2	10.9	15.2	15.4	15.2	16.2	17.7	17.5	13.4	10.3	9.0	3.9	
Vermont	6.1	5.5	4.0	3.4	3.9	5.6	5.3	5.2	5.5	5.6	4.5	3.9	3.1	1.7	
Massachusetts	101.4	99.2	98.1	89.6	106.5	137.3	146.8	155.8	154.7	119.2	95.1	69.1	87.2	50.6	
Rhode Island	19.2	17.1	17.4	20.2	27.5	33.2	37.7	48.4	51.7	42.1	25.7	23.3	21.5	10.2	
Connecticut	41.2	35.6	35.3	39.6	46.2	61.7	59.8	58.8	54.9	54.3	45.4	38.3	29.3	13.4	
Middle Atlantic	665.5	678.3	663.7	637.4	631.8	692.9	680.4	614.1	558.5	536.7	528.2	493.5	472.3	307.4	
New York	379.1	385.9	378.3	361.3	355.5	386.4	413.7	361.0	320.9	314.3	307.4	300.3	288.3	184.3	
New Jersey	161.5	91.4	84.4	78.8	82.1	94.5	96.7	98.2	96.6	87.3	81.6	71.3	67.4	54.4	
Pennsylvania	204.9	201.0	197.0	194.2	212.0	210.0	194.9	141.9	136.5	132.3	114.8	104.6	65.7		
East North Central	477.9	510.9	462.6	384.6	371.4	409.1	390.0	393.1	396.0	359.0	335.5	304.4	233.8	161.1	
Ohio	157.4	141.6	144.9	135.2	112.9	113.5	100.8	93.4	91.4	84.9	78.8	69.3	58.7	35.2	
Indiana	38.8	40.3	37.1	30.9	29.7	37.3	37.9	37.9	38.1	37.5	38.8	35.1	29.6	17.2	
Illinois	158.4	141.1	133.4	134.3	149.0	166.2	160.7	159.4	148.5	121.1	102.7	96.7	82.6	58.6	
Michigan	80.3	150.7	114.5	62.0	58.7	67.4	68.8	80.8	95.6	92.2	90.6	80.3	62.5	41.2	
Wisconsin	34.0	37.2	32.1	22.2	21.1	24.7	21.8	21.6	22.4	23.3	24.6	23.0	20.4	8.9	
West North Central	130.8	93.6	73.3	55.7	58.0	64.6	64.4	68.2	76.4	86.2	97.0	97.2	73.3	50.6	
Minnesota	34.7	24.0	16.8	13.8	15.8	17.3	16.4	17.3	20.2	28.6	30.4	28.0	11.3		
Iowa	15.2	10.0	6.6	5.0	5.5	7.3	7.5	7.5	7.9	9.5	11.4	11.2	8.4	5.5	
Missouri	50.2	41.1	39.0	31.5	29.1	31.9	32.5	35.5	36.2	35.3	37.7	38.4	30.1	23.1	
North Dakota	3.8	1.9	.6	.2	.2	.3	.3	.3	.5	1.4	2.3	2.2	1.4	.9	
South Dakota	3.0	1.8	.7	.4	.4	.5	.4	.4	.5	1.0	1.8	2.0	1.4	.8	
Nebraska	7.9	4.5	2.2	1.7	1.7	1.9	1.9	1.8	2.1	3.0	4.1	4.9	3.7	2.4	
Kansas	16.0	10.3	7.4	6.1	5.3	5.4	5.4	6.0	7.4	9.3	10.5	7.4	6.6		
South Atlantic	180.3	168.3	161.4	163.3	181.5	220.0	219.7	206.4	192.5	172.2	157.7	144.9	128.8	69.1	
Delaware	3.8	3.8	3.2	3.4	3.1	3.4	2.6	2.5	2.4	2.7	2.5	2.0	1.7		
Maryland	31.8	30.8	28.6	27.2	28.8	30.3	38.6	36.3	37.3	30.0	24.0	24.3	23.0	13.0	
District of Columbia	5.0	4.4	4.3	4.8	4.4	4.4	4.4	4.2	4.2	5.0	5.6	5.4	4.1	3.8	
Virginia	20.6	19.2	15.8	15.9	17.8	20.8	20.5	26.3	21.1	18.1	18.8	16.6	13.8	5.9	
West Virginia	28.7	25.4	28.4	27.9	27.9	30.9	28.7	27.2	21.3	20.0	18.0	16.3	8.8		
North Carolina	27.7	26.7	26.2	31.2	38.3	39.8	41.0	38.7	38.9	35.0	29.7	26.9	10.8		
South Carolina	15.8	16.5	15.1	14.8	17.0	20.8	20.5	20.5	20.2	17.3	14.6	12.8	10.8		
Georgia	24.7	22.2	19.8	19.0	23.5	28.1	28.4	28.2	28.5	24.0	22.2	20.5	17.9	8.5	
Florida	19.6	19.3	20.0	24.6	28.8	31.4	28.5	21.9	19.2	16.5	16.8	16.7	11.6		
East South Central	113.2	100.2	101.1	97.4	98.4	114.1	113.3	114.4	111.7	109.4	109.8	100.1	82.5	44.2	
Kentucky	26.7	25.2	26.6	25.8	25.2	27.6	27.4	28.0	26.4	24.5	25.6	22.1	16.9	8.2	
Tennessee	42.5	37.5	35.4	31.2	33.6	39.4	40.3	45.0	45.7	47.4	48.5	45.5	40.0		
Alabama	27.1	25.6	30.1	31.5	29.6	34.5	33.5	30.3	27.7	25.6	22.8	20.2	16.0	10.7	
Mississippi	16.9	11.9	9.0	10.0	12.8	12.1	11.1	11.9	12.0	12.9	12.3	9.6	4.9		
West South Central	100.4	73.3	63.7	64.2	67.8	73.8	68.2	67.0	73.4	80.8	85.0	83.1	55.2	39.3	
Arkansas	20.4	13.3	10.8	10.3	10.1	11.0	10.3	10.5	12.4	15.2	17.1	19.9	13.5	8.5	
Louisiana	30.0	23.5	21.6	22.5	23.1	24.3	22.2	20.6	21.9	24.4	25.1	23.9	15.2	11.5	
Oklahoma	20.1	14.8	12.7	12.3	13.0	14.5	13.2	12.9	13.0	13.5	14.9	15.6	11.4	8.4	
Texas	29.9	21.7	18.6	19.2	21.6	24.0	22.3	23.0	26.1	27.7	27.9	25.7	15.1	10.9	
Mountain	60.1	39.2	29.4	27.9	23.5	25.2	22.2	19.7	22.1	28.8	38.8	43.3	34.1	19.5	
Montana	11.3	6.0	3.0	2.1	2.0	2.1	2.2	2.2	2.8	4.7	6.2	6.6	4.6	2.0	
Idaho	11.7	7.2	3.5	2.6	2.5	1.9	1.6	1.3	2.0	3.8	6.6	7.8	6.2	3.5	
Wyoming	3.1	1.6	.9	.7	.5	.6	.7	.7	1.1	1.6	1.9	1.1	.7		
Colorado	8.5	6.1	6.7	7.4	4.0	4.9	4.6	4.8	5.3	4.8	5.6	5.8	4.3	2.4	
New Mexico	4.3	3.2	2.2	2.0	2.3	2.7	2.3	1.8	2.1	2.6	3.2	2.0	1.4		
Arizona	7.0	5.8	5.8	5.6	6.1	6.7	5.3	4.9	4.8	5.8	6.9	6.6	5.1	2.9	
Utah	10.3	6.5	5.2	5.5	4.3	4.4	3.9	2.5	2.7	3.8	6.0	8.2	8.4	3.9	
Nevada	3.9	2.8	2.4	2.0	1.9	1.7	1.5	1.7	2.2	2.7	3.1	2.4	1.7		
Pacific	430.1	345.3	284.3	246.8	245.1	270.9	271.3	275.3	294.3	336.4	388.8	389.1	322.4	200.9	
Washington	87.4	62.9	45.0	36.4	30.6	31.4	25.5	22.4	35.3	48.5	61.2	53.7	33.6		
Oregon	56.8	36.3	27.7	21.1	17.7	18.1	15.2	10.2	13.4	19.7	31.9	40.3	31.9	17.8	
California	235.9	246.1	208.6	190.3	190.8	231.4	230.6	242.7	255.2	281.4	308.4	287.6	268.8	150.0	

¹ Average of weeks ended in specified months. Figures may not add to exact column totals because of rounding.

For a technical description of this series, see p. 382 of this issue.

SOURCE: U. S. Department of Labor, Bureau of Employment Security.

B: Labor Turn-Over

TABLE B-1: Monthly Labor Turn-Over Rates (Per 100 Employees) in Manufacturing Industries, by Class of Turn-Over¹

Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accession:												
1950	23.6											
1949	3.2	2.9	3.0	2.9	3.5	4.4	3.5	4.4	4.1	3.7	3.3	3.2
1948	4.6	3.9	4.0	4.0	4.1	5.7	4.7	5.0	5.1	4.5	3.9	2.7
1947	6.0	5.0	5.1	5.1	4.8	5.5	4.9	5.3	5.9	5.5	4.8	3.6
1939 ²	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8
Total separation:												
1950	23.1											
1949	4.6	4.1	4.8	4.8	5.3	4.3	3.8	4.0	4.2	4.1	4.0	3.2
1948	4.3	4.2	4.8	4.7	4.5	4.5	4.4	5.1	5.4	4.5	4.1	4.3
1947	4.9	4.5	4.9	5.2	5.4	4.7	4.6	5.2	5.9	5.0	4.0	3.7
1939 ²	3.2	2.6	3.1	3.6	3.5	3.3	3.3	3.0	2.8	2.9	3.0	3.6
Quit: ³												
1950	1.1											
1949	1.7	1.4	1.6	1.7	1.6	1.5	1.4	1.8	2.1	1.5	1.2	1.0
1948	2.6	2.5	2.8	3.0	2.8	2.9	2.9	3.4	3.9	2.8	2.2	1.7
1947	3.5	3.2	3.5	3.7	3.5	3.1	3.1	4.0	4.5	3.6	2.7	2.3
1939 ²	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
Discharge:												
1950	1.2											
1949	.3	.3	.3	.2	.2	.2	.2	.3	.2	.2	.2	.2
1948	.4	.4	.4	.4	.3	.4	.4	.4	.4	.4	.4	.3
1947	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4
1939 ²	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.1	.1
Lay-off: ⁴												
1950	1.7											
1949	2.5	2.3	2.8	2.8	3.3	2.5	2.1	1.8	1.8	2.3	2.5	1.9
1948	1.2	1.2	1.2	1.2	1.1	1.1	1.0	1.2	1.0	1.2	1.4	2.2
1947	.9	.8	.9	1.0	1.4	1.1	1.0	.8	.9	.9	.9	.9
1939 ²	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
Miscellaneous, including military: ⁵												
1950	.1											
1949	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1948	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1947	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1

¹ Month-to-month changes in total employment in manufacturing industries as indicated by labor turn-over rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month, while the latter, for the most part, refer to a 1-week period ending nearest the 15th of the month. The turn-over sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing, and certain seasonal industries, such as canning and preserving, are not covered. Plants on strike are also excluded. See note, table B-2.

² Preliminary figures.

³ Prior to 1943, rates relate to wage earners only.

⁴ Prior to September 1940, miscellaneous separations were included with quits.

⁵ Including temporary, indeterminate (of more than 7 days' duration), and permanent lay-offs.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Groups and Industries¹

Industry group and industry	Total accession		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	Jan. ² 1950	Dec. 1949	Jan. ² 1950	Dec. 1949								
MANUFACTURING												
Durable goods	3.8	3.8	3.0	3.1	1.0	0.9	0.2	0.1	1.7	2.0	0.1	0.1
Nondurable goods	3.4	2.6	3.3	3.2	1.3	1.1	0.2	0.2	1.7	1.8	0.1	0.1
<i>Durable goods</i>												
Iron and steel and their products	3.1	2.9	2.0	2.5	.8	.9	.1	.1	1.0	1.4	.1	.1
Blast furnaces, steel works, and rolling mills	2.1	1.9	1.2	2.0	.6	.9	.1	.1	.3	.8	.2	.2
Gray-iron castings	5.0	4.1	4.0	4.7	.8	1.1	.2	.2	2.8	3.3	.2	.1
Malleable-iron castings	4.5	2.8	2.7	2.6	.8	.6	.1	.1	1.6	1.8	.2	.1
Steel castings	4.0	3.0	2.2	2.8	.6	.4	.2	.1	1.3	2.2	.1	.1
Cast-iron pipe and fittings	1.6	2.0	2.1	1.1	.3	.3	.1	.1	1.6	.7	.1	(8)
Tin cans and other tinware	7.1	1.2	5.1	7.1	1.1	1.7	.4	.3	3.4	5.1	.2	.2
Wire products	3.0	6.0	1.7	3.5	.6	.7	.1	.1	.9	2.6	.1	.1
Cutlery and edge tools	1.9	2.8	2.9	2.5	.7	.8	.3	.1	1.8	1.5	.1	.1
Tools (except edge tools, machine tools, files, and saws)	2.2	2.9	2.4	1.4	.7	.6	.4	.2	1.1	.6	.2	(8)
Hardware	4.9	3.6	3.1	1.7	1.5	1.1	.2	.2	1.3	.3	.1	.1
Stoves, oil burners, and heating equipment	5.8	3.0	4.3	4.6	1.4	1.0	.3	.2	2.6	3.4	.1	(8)
Steam and hot-water heating apparatus and steam fittings	2.5	1.7	1.8	3.4	.9	.7	.1	.2	.8	2.4	(8)	.1
Stamped and enameled ware and galvanizing	5.4	4.9	3.0	3.0	1.1	.8	.2	.1	1.5	1.9	.2	.2
Fabricated structural-metal products	2.5	2.4	3.7	5.6	.9	.9	.2	.2	2.5	4.3	.1	.1
Bolts, nuts, washers, and rivets	2.4	3.0	1.5	1.8	.7	.7	.2	.1	.5	.9	.1	.1
Forgings, iron and steel	3.9	4.7	1.7	2.8	.5	.6	.1	.1	1.1	2.0	(8)	.1
Electrical machinery	3.7	2.5	2.5	2.8	1.0	.8	.2	.2	1.2	1.7	.1	.1
Electrical equipment for industrial use	1.7	1.6	1.5	1.7	.6	.6	.1	(8)	.6	1.0	.2	.1
Radios, radio equipment, and phonographs	7.0	3.9	3.9	3.6	1.9	1.6	.4	.4	1.5	1.5	.1	.1
Communication equipment, except radios	.8	.7	2.4	2.8	.4	.3	.1	.1	1.8	2.1	.1	.3
Machinery, except electrical	3.2	2.4	2.1	2.1	.7	.5	.1	.1	1.2	1.4	.1	.1
Engines and turbines	4.6	2.4	2.5	3.3	.6	.5	.1	.1	1.5	2.6	.3	.1
Agricultural machinery and tractors	2.9	2.7	1.6	1.8	.8	.6	.1	.1	.6	.9	.1	.2
Machine tools	2.0	1.2	2.0	1.2	.5	.3	.1	.1	1.3	.7	.1	.1
Machine-tool accessories	5.0	2.7	3.5	3.1	.8	.6	.1	.1	2.6	2.3	(8)	.1
Metalworking machinery and equipment, not elsewhere classified	2.7	1.7	2.5	2.1	.9	.6	.2	.2	1.3	1.2	.1	.1
General industrial machinery, except pumps	3.1	2.0	1.9	2.2	.6	.5	.1	.1	1.1	1.5	.1	.1
Pumps and pumping equipment	1.7	1.7	2.3	1.5	.6	.5	.1	.1	1.3	.7	.3	.2
Transportation equipment, except automobiles	5.2	4.5	5.2	5.6	.9	.8	.2	.2	4.0	4.5	.1	.1
Aircraft	3.0	2.7	2.7	2.3	1.1	.9	.1	.1	1.4	1.2	.1	.1
Aircraft parts, including engines	1.7	1.8	1.9	1.4	.6	.5	.1	.1	1.2	.7	(8)	.1
Shipbuilding and repairs	(8)	12.3	(4)	16.0	(4)	1.1	(8)	.3	(8)	15.4	(8)	.1
Automobiles	6.3	10.9	3.0	3.8	1.3	.8	.2	.1	1.4	2.8	.1	.1
Motor vehicles, bodies, and trailers	5.5	11.6	2.8	4.1	1.5	.9	.2	.1	.9	3.0	.2	.1
Motor-vehicle parts and accessories	7.9	9.6	3.9	3.1	1.0	.5	.1	.1	2.7	2.4	.1	.1
Nonferrous metals and their products	3.7	3.7	2.9	2.0	.8	.7	.2	.2	1.7	1.9	.2	.1
Primary smelting and refining, except aluminum and magnesium	1.8	2.1	1.2	1.6	.6	.4	.2	.2	.3	.9	.1	.1
Rolling and drawing of copper and copper alloys	3.0	2.4	1.2	1.4	1.7	.5	.1	.1	.3	.7	.1	.1
Lighting equipment	4.9	6.1	4.3	4.5	.6	1.2	(8)	.1	3.0	3.1	.7	.1
Nonferrous metal foundries, except aluminum and magnesium	4.9	2.9	2.8	2.9	1.1	.9	.2	.2	1.3	1.7	.2	.1
Lumber and timber basic products	3.2	2.8	5.3	4.5	1.3	1.4	.2	.2	3.7	2.8	.1	.1
Sawmills	2.8	2.2	5.4	3.2	1.5	1.2	.1	.2	3.9	1.7	.1	.1
Planing and plywood mills	4.2	3.5	2.9	1.8	1.1	1.1	.2	.1	1.8	.5	.1	.1
Furniture and finished lumber products	5.9	4.3	3.4	3.3	1.7	1.2	.4	.3	1.2	1.7	.1	.1
Furniture, including mattresses and bedsprings	6.2	4.6	3.5	3.4	1.8	1.5	.4	.4	1.2	1.7	.1	(8)
Stone, clay, and glass products	2.4	2.3	3.0	2.6	.7	.8	.2	.2	1.4	1.5	.2	.1
Glass and glass products	3.1	3.6	2.9	3.1	.6	.8	.1	.1	1.8	2.1	.4	.1
Cement	1.0	.8	2.4	1.7	.8	.6	.2	.1	1.3	.9	.1	.1
Brick, tile, and terra cotta	2.2	2.4	2.6	3.6	.9	1.1	.2	.3	1.5	2.2	(8)	(8)
Pottery and related products	1.7	2.0	2.0	1.9	.9	.9	.3	.2	.7	.8	.1	(8)

See footnotes at end of table.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Groups and Industries¹—Continued

Industry group and industry	Total separation		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	Jan. ² 1950	Dec. 1949	Jan. ² 1950	Dec. 1949								
MANUFACTURING—Continued												
<i>Non durable goods</i>												
Textile-mill products.....	3.0	2.6	3.0	2.7	1.4	1.1	6.2	6.2	1.3	1.3	0.1	0.1
Cotton.....	3.1	2.7	3.0	2.5	1.7	1.3	.3	.2	.9	1.0	.1	(.1)
Silk and rayon goods.....	3.6	2.8	3.1	2.3	1.2	1.1	.2	.2	1.6	.9	.1	.1
Woolen and worsted, except dyeing and finishing.....	2.9	2.7	4.1	3.6	1.0	1.0	.2	.1	2.7	2.4	.2	.1
Hosiery, full-fashioned.....	1.5	.8	2.1	2.3	1.2	1.1	.3	.2	.6	.9	(.1)	.1
Hosiery, seamless.....	2.6	2.5	3.5	2.4	1.9	1.6	.2	.1	1.4	.7	(.1)	(.1)
Knitted underwear.....	2.6	1.3	3.1	4.5	1.6	1.5	.3	.2	1.2	2.8	(.1)	(.1)
Dyeing and finishing textiles, including woolen and worsted.....	2.5	2.3	2.3	2.2	.9	.8	.2	.2	1.1	1.1	.1	.1
Apparel and other finished textile products.....	5.1	3.8	3.8	4.1	2.1	1.8	.2	.2	1.4	2.1	.1	(.1)
Men's and boys' suits, coats, and overcoats.....	8.6	5.8	3.6	4.6	1.8	1.2	1	.1	1.6	3.1	.1	.1
Men's and boys' furnishings, work clothing, and allied garments.....	3.2	2.3	4.4	3.8	2.3	2.2	.3	.1	1.8	1.5	(.1)	(.1)
Leather and leather products.....	3.4	3.5	2.9	2.6	1.4	1.2	.2	.1	1.0	1.1	.3	.2
Leather.....	2.2	2.2	2.9	1.8	.5	.5	.2	.1	1.6	1.1	.3	.1
Boots and shoes.....	3.6	3.7	3.0	2.6	1.6	1.2	.2	.1	.9	1.1	.3	.2
Food and kindred products.....	3.8	3.3	5.4	4.7	1.3	1.3	.3	.4	3.7	2.9	.1	.1
Meat products.....	4.5	4.5	5.9	5.0	1.4	1.6	.3	.4	4.1	2.9	.1	.1
Grain-mill products.....	2.0	1.5	2.6	1.8	1.1	.8	.4	.3	1.0	.6	.1	.1
Bakery products.....	2.5	1.6	3.4	4.2	1.2	1.2	.2	.3	1.9	2.7	.1	(.1)
Tobacco manufactures.....	2.2	1.5	4.0	3.8	1.3	.8	.3	.2	2.3	2.7	.1	.1
Paper and allied products.....	1.8	1.4	1.7	1.8	.7	.9	.1	.1	.8	.7	.1	.1
Paper and pulp.....	1.6	1.1	1.4	1.6	.6	.8	.1	.1	.6	.6	.1	.1
Paper boxes.....	2.0	1.5	2.7	2.7	1.2	1.1	.2	.2	1.2	1.2	.1	.2
Chemicals and allied products.....	1.9	1.2	1.2	1.2	.4	.3	1	.1	.6	.7	.1	.1
Paints, varnishes, and colors.....	1.9	.9	1.4	1.2	.6	.5	.1	.1	.6	.5	.1	.1
Rayon and allied products.....	1.2	1.3	1.0	1.2	.3	.3	(.1)	.1	.7	.8	(.1)	(.1)
Industrial chemicals, except explosives.....	2.2	1.3	1.1	1.1	.3	.3	.1	.1	.6	.6	.1	.1
Products of petroleum and coal.....	.2	.4	.7	1.4	.2	.3	(.1)	(.1)	.3	.9	.2	.2
Petroleum refining.....	.1	.2	.6	1.2	.2	.2	(.1)	(.1)	.2	.8	.2	.2
Rubber products.....	3.2	2.2	3.1	2.3	1.0	.8	.1	.1	1.9	1.3	.1	.1
Rubber tires and inner tubes.....	2.5	1.8	1.2	1.5	.6	.5	(.1)	.1	.5	.8	.1	.1
Rubber footwear and related products.....	1.8	1.5	8.7	2.2	1.5	1.2	.1	.1	7.0	.8	.1	.1
Miscellaneous rubber industries.....	5.7	3.5	3.2	3.2	1.5	1.0	.2	.2	1.4	1.9	.1	.1
Miscellaneous industries.....	(1)	2.0	(1)	2.9	(1)	.6	(1)	.1	(1)	2.1	(1)	.1
NONMANUFACTURING												
Metal mining.....	2.3	3.3	1.9	3.0	1.0	1.8	.2	.2	.5	.8	.2	.2
Iron-ore.....	1.8	1.3	1.3	1.9	.5	.8	.1	(.1)	.4	.8	.3	.3
Copper-ore.....	2.1	4.7	1.6	2.6	1.0	2.0	.2	.1	.2	.3	.2	.2
Lead- and zinc-ore.....	2.0	3.1	2.9	4.2	1.4	2.1	.1	.2	1.2	1.7	.2	.2
Coal mining:												
Anthracite.....	1.1	1.6	1.1	1.7	.8	1.3	(1)	(1)	.1	.8	.2	.1
Bituminous.....	(1)	1.6	(1)	1.4	(1)	1.1	(1)	(1)	(1)	.2	(1)	.1
Communication:												
Telephone.....	(1)	.5	(1)	1.1	(1)	.7	(1)	(1)	(1)	.3	(1)	.1
Telegraph.....	(1)	1.5	(1)	2.8	(1)	.7	(1)	(1)	(1)	1.8	(1)	.3

¹ Since January 1943 manufacturing firms reporting labor turn-over information have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample, comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products. Labor turn-over data, beginning in January 1943, refer to wage and salary workers.

Employment information for wage and salary workers is available for major manufacturing industry groups (table A-3); for individual industries these data refer to production workers only (table A-6).

² Preliminary figures.

³ Less than 0.05.

⁴ Not available.

NOTE: Explanatory notes outlining the concepts, sources, size of the reporting sample, and methodology used in preparing the data presented in tables B-1 and B-2 are contained in the Bureau's monthly mimeographed release, "Labor Turn-Over," which is available upon request.

C: Earnings and Hours

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹

Year and month	Mining															Coal											
	Metal															Anthracite											
	Total: Metal					Iron				Copper				Lead and zinc				Anthracite					Bituminous				
	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earn. hours			
1947: Average	\$54.63	41.8	\$1.307	\$52.34	40.2	\$1.302	\$59.27	44.8	\$1.223	\$35.00	41.3	\$1.334	\$62.77	37.7	\$1.664	\$66.59	40.7	\$1.636									
1948: Average	60.80	42.4	1.434	58.32	41.3	1.412	65.81	45.2	1.456	61.37	41.3	1.486	66.57	36.8	72.12	50.7	1.898										
1949: January	64.75	42.1	1.538	62.75	42.0	1.494	72.15	45.9	1.572	68.67	42.0	1.635	67.39	36.0	1.872	76.32	39.2	1.947									
February	64.74	42.4	1.527	62.81	42.1	1.492	67.55	43.7	1.546	67.82	42.1	1.611	47.97	26.1	1.838	73.56	37.9	1.941									
March	66.16	45.3	1.528	65.30	42.4	1.493	70.90	46.1	1.538	69.56	43.1	1.614	46.15	25.0	1.846	70.54	38.4	1.958									
April	64.71	42.6	1.519	62.20	41.8	1.488	71.35	46.3	1.541	64.74	41.0	1.579	58.82	30.6	1.847	72.32	37.4	1.934									
May	63.77	42.2	1.510	61.64	41.4	1.484	69.49	47.7	1.514	64.03	41.9	1.576	63.63	34.4	1.866	72.98	37.5	1.946									
June	60.63	40.6	1.491	60.28	40.8	1.471	65.02	48.8	1.485	63.20	40.6	1.547	45.28	24.4	1.935	59.90	30.7	1.951									
July	58.15	39.4	1.491	58.97	39.7	1.472	59.43	49.7	1.479	61.41	39.9	1.565	66.28	35.0	1.888	47.94	25.1	1.910									
August	58.18	39.5	1.473	57.32	39.1	1.466	56.20	38.0	1.479	59.87	40.1	1.493	42.80	23.4	1.829	49.51	26.1	1.897									
September	58.96	39.6	1.489	56.15	39.3	1.505	58.27	39.4	1.479	60.34	40.2	1.501	59.24	31.8	1.863	52.46	27.0	1.943									
October	59.63	40.1	1.487	54.46	35.5	1.534	59.20	40.3	1.469	61.95	40.7	1.522	75.81	39.2	1.934	63.10	31.9	1.978									
November	52.73	35.7	1.477	58.78	26.6	1.458	59.70	40.2	1.485	61.99	40.7	1.523	67.94	35.7	1.903	68.17	34.1	1.999									
December	62.81	41.9	1.499	60.27	41.0	1.470	64.26	42.5	1.512	67.68	43.3	1.563	42.22	22.0	1.919	48.93	25.5	1.919									
1950: January	65.03	42.7	1.523	60.06	40.5	1.483	75.52	47.2	1.600	65.58	42.5	1.543	44.60	23.9	1.866	47.62	24.7	1.928									
Mining—Continued															Contract construction ²												
Crude petroleum and natural gas production															Nonbuilding construction												
Nonmetallic mining and quarrying															Total: Contract construction					Total: Nonbuilding construction							
Petroleum and natural gas production															Highway and street					Other nonbuilding construction ^{a, b}							
1947: Average	\$59.36	40.3	\$1.473	\$50.54	45.0	\$1.123									\$68.21	\$1.790	\$66.61	40.6	\$1.639	\$62.41	41.6	\$1.500	\$68.67	40.0	\$1.716		
1948: Average	66.68	40.0	1.667	55.31	44.5	1.243																					
1949: January	73.32	41.1	1.784	54.91	42.7	1.266	70.14	37.5	1.869	67.54	39.5	1.710	59.98	39.2	1.530	71.59	39.7	1.804									
February	70.37	39.8	1.768	54.36	42.3	1.265	69.96	37.3	1.877	68.06	39.1	1.714	61.17	39.8	1.536	71.18	39.7	1.704									
March	69.54	39.5	1.756	54.20	42.5	1.260	69.42	37.5	1.875	67.28	38.5	1.703	61.96	40.4	1.534	69.98	39.0	1.703									
April	70.30	39.9	1.756	56.38	43.0	1.262	69.86	37.3	1.872	66.47	40.1	1.709	62.44	40.2	1.535	72.29	40.0	1.807									
May	70.78	40.6	1.768	58.17	44.3	1.313	71.70	38.5	1.864	71.42	41.7	1.712	67.17	42.9	1.567	74.43	40.9	1.820									
June	70.59	39.7	1.778	57.82	43.8	1.320	71.41	38.5	1.856	71.34	41.9	1.704	66.52	42.3	1.574	75.04	41.5	1.807									
July	72.54	40.3	1.800	56.77	43.4	1.308	71.55	38.6	1.856	72.20	42.2	1.712	68.17	43.3	1.575	75.21	41.4	1.818									
August	70.74	40.1	1.764	57.86	44.3	1.306	72.12	38.7	1.862	72.56	42.4	1.712	68.55	43.4	1.578	75.69	41.5	1.822									
September	72.40	40.4	1.792	56.68	43.2	1.312	70.73	37.7	1.874	70.82	40.9	1.730	66.75	41.6	1.607	73.81	40.5	1.823									
October	73.87	41.2	1.793	57.77	44.2	1.307	70.06	37.6	1.881	72.71	41.8	1.741	68.37	42.3	1.617	75.83	41.4	1.831									
November	71.20	40.0	1.780	55.77	42.7	1.306	70.12	37.1	1.869	69.39	39.9	1.754	65.30	40.6	1.610	72.96	39.4	1.852									
December	71.20	40.0	1.780	54.99	42.4	1.297	69.75	36.4	1.917	68.15	38.3	1.777	60.75	37.0	1.644	72.76	39.2	1.855									
1950: January	75.64	41.7	1.814	53.40	41.2	1.296	75.45	37.3	1.912	64.58	37.0	1.745	58.07	35.5	1.638	68.69	38.0	1.809									
Contract construction ² —Continued															Building construction												
Total: Building construction															General contractors					Special-trade contractors							
General contractors															Total: Special-trade contractors					Plumbing and heating							
Total: Special-trade contractors															Painting and decorating					Electrical work							
1947: Average	\$68.85	37.3	\$1.548	\$64.64	36.6	\$1.766	\$73.87	38.0	\$1.946	\$76.83	38.2	\$1.960	\$69.77	36.3	\$1.925	\$83.01	39.8	\$2.084									
1948: Average																											
1949: January	70.88	37.0	1.918	66.84	36.5	1.833	75.50	37.5	2.012	79.08	39.1	2.022	68.33	34.4	1.985	87.49	40.0	2.186									
February	70.53	36.5	1.930	66.84	36.1	1.827	75.13	37.1	2.027	78.16	38.8	2.014	68.92	34.9	1.974	86.35	39.4	2.201									
March	69.83	36.1	1.933	66.69	35.8	1.864	73.87	36.5	2.022	77.33	38.6	2.003	69.73	35.5	1.964	85.67	38.8	2.205									
April	70.33	36.4	1.934	66.88	35.9	1.862	74.84	36.9	2.027	76.93	38.3	2.009	69.66	35.5	1.965	86.84	39.3	2.209									
May	71.81	37.2	1.940	68.34	36.8	1.858	76.29	37.7	2.023	77.75	38.5	2.018	71.93	36.6	1.963	87.01	39.2	2.220									
June	71.44	37.1	1.924	67.70	36.7	1.846	76.43	37.7	2.028	77.95	38.6	2.022	72.18	36.8	1.961	87.02	39.3	2.215									
July	71.28	37.1	1.922	67.33	36.6	1.838	76.59	37.7	2.032	78.08	38.8	2.013	72.18	36.7	1.968	86.41	39.2	2.202									
August	71.95	37.2	1.933	68.02	36.8	1.846	76.99	37.8	2.036	79.13	38.9	2.032	72.51	36.4	1.992	87.80	39.7	2.210									
September	70.69	36.5	1.938	66.64	36.0	1.854	75.80	37.2	2.040	79.15	38.6	2.052	71.59	35.7	2.006	85.80	38.8	2.210									
October	71.80	36.9	1.944	67.89	36.5	1.861	76.51	37.5	2.044	80.32	38.9	2.064	71.41	35.7</													

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Contract construction ² —Continued																		
	Building construction—Continued																		
	Special-trade contractors—Continued																		
	Other special-trade contractors ³	Masonry			Plastering and lathing			Carpentry			Roofing and sheet-metal work			Excavation and foundation work					
	Avg. wky. earnings	Avg. wky. hours	Avg. brly. earnings	Avg. wky. hours	Avg. brly. earnings	Avg. wky. hours	Avg. brly. earnings	Avg. wky. hours	Avg. brly. earnings	Avg. wky. hours	Avg. brly. earnings	Avg. wky. hours	Avg. brly. earnings	Avg. wky. hours	Avg. brly. earnings	Avg. wky. hours	Avg. brly. earnings		
1947: Average																			
1948: Average	\$60.65	36.9	\$1,888	\$60.61	35.4	\$1,969	\$75.52	36.1	\$2,175	\$67.98	37.9	\$1,792	\$62.47	36.5	\$1,710	\$60.44	38.9	\$1,700	
1949: January	70.26	36.2	1,942	70.08	34.5	2,030	76.82	34.4	2,230	68.96	37.9	1,821	62.71	35.5	1,768	64.53	38.5	1,707	
February	70.01	35.6	1,968	65.33	32.2	2,044	78.56	34.5	2,221	64.92	35.9	1,810	58.91	33.6	1,754	68.00	37.4	1,818	
March	68.24	34.7	1,966	65.44	32.1	2,038	77.51	34.6	2,241	64.41	35.7	1,802	58.80	33.6	1,748	66.11	36.6	1,807	
April	70.50	35.6	1,979	68.08	33.4	2,036	80.27	35.2	2,283	65.00	36.7	1,773	61.50	35.5	1,740	60.51	37.1	1,700	
May	72.77	37.0	1,968	70.97	35.2	2,018	79.88	34.7	2,303	67.09	38.1	1,763	63.99	36.9	1,735	70.28	39.0	1,803	
June	73.02	36.9	1,977	71.23	35.0	2,034	83.73	35.2	2,338	67.00	38.0	1,763	64.20	36.9	1,729	71.67	38.9	1,842	
July	73.46	36.8	1,998	71.47	35.1	2,037	84.59	36.0	2,352	66.40	37.0	1,795	64.50	36.8	1,753	71.93	38.6	1,863	
August	73.36	36.6	1,988	71.36	35.3	2,028	83.13	35.7	2,320	66.45	36.3	1,831	64.53	36.7	1,759	72.51	38.9	1,863	
September	71.58	36.1	1,982	66.31	32.9	2,015	84.39	36.3	2,322	67.22	35.8	1,876	62.95	36.0	1,750	70.58	37.6	1,878	
October	72.26	36.5	1,978	70.60	34.7	2,035	81.11	35.0	2,316	68.46	36.1	1,899	65.96	37.1	1,774	72.22	38.4	1,882	
November	70.77	35.7	1,984	71.68	35.0	2,047	74.76	32.5	2,302	69.57	36.3	1,915	63.73	35.9	1,775	69.46	37.5	1,864	
December	69.18	34.6	2,001	60.92	29.8	2,044	77.50	33.5	2,311	67.99	35.9	1,889	61.30	34.1	1,799	68.80	35.4	1,890	
1950: January	66.32	33.4	1,987	62.61	30.8	2,000	75.53	32.6	2,316	67.70	35.7	1,894	58.13	32.3	1,798	66.42	35.0	1,890	
Manufacturing																			
Total: Manufacturing				Durable goods ⁵			Nondurable goods ⁶			Total: Ordnance and accessories			Food and kindred products						
													Total: Food and kindred products		Meat products				
1947: Average	\$49.97	40.4	\$1,237	\$52.46	40.5	\$1,292	\$46.96	40.1	\$1,171	\$53.74	41.5	\$1,295	\$48.82	42.9	\$1,138	\$54.55	44.3	\$1,232	
1948: Average	54.14	40.1	1,350	57.11	40.5	1,410	50.61	39.6	1,278	57.20	41.6	1,375	51.87	42.0	1,235	58.37	43.3	1,345	
1949: January	55.50	39.5	1,405	58.83	40.1	1,467	51.35	38.7	1,327	58.08	40.9	1,420	53.62	41.5	1,202	59.59	42.9	1,380	
February	55.20	39.4	1,401	58.49	39.9	1,466	50.33	38.8	1,323	59.22	41.3	1,434	53.07	41.3	1,285	55.70	41.2	1,352	
March	54.74	39.1	1,400	57.83	39.5	1,454	51.57	38.6	1,323	57.94	39.6	1,462	52.80	40.9	1,291	55.25	40.3	1,371	
April	53.80	38.4	1,401	57.21	39.0	1,469	50.67	37.6	1,323	57.44	38.7	1,475	52.33	40.6	1,289	54.98	39.9	1,378	
May	54.88	38.6	1,401	57.21	39.0	1,467	50.41	38.6	1,323	59.32	40.3	1,472	53.44	41.3	1,294	56.17	40.7	1,380	
June	54.51	38.8	1,405	57.82	39.2	1,473	50.97	38.5	1,324	58.72	39.7	1,479	53.62	41.6	1,289	55.87	40.4	1,383	
July	54.63	38.8	1,408	57.31	38.8	1,477	51.55	37.8	1,332	59.64	40.3	1,480	54.69	42.2	1,296	58.02	41.8	1,388	
August	54.70	39.1	1,399	57.89	39.3	1,473	51.31	38.9	1,319	58.44	39.7	1,472	53.00	41.7	1,271	56.87	41.0	1,387	
September	55.72	39.6	1,407	58.69	39.6	1,482	52.59	39.6	1,328	59.76	40.3	1,483	53.63	41.8	1,283	57.78	41.6	1,389	
October	55.26	37.9	1,392	58.17	39.9	1,458	52.47	39.6	1,325	59.97	40.3	1,488	53.83	41.7	1,291	56.51	41.1	1,375	
November	54.43	39.1	1,392	56.82	39.0	1,457	52.07	39.3	1,325	59.82	40.2	1,488	54.16	41.6	1,302	60.23	42.9	1,404	
December	56.18	39.9	1,408	59.15	40.1	1,475	52.73	39.5	1,335	60.85	40.7	1,495	54.70	41.5	1,318	61.02	43.4	1,406	
1950: January	56.33	39.7	1,419	59.44	40.0	1,486	52.82	39.3	1,344	60.70	40.2	1,510	55.02	41.4	1,329	60.22	42.8	1,407	
Food and kindred products—Continued																			
Meat packing				Dairy products			Canning and preserving			Grain-mill products			Flour and other grain-mill products			Prepared feeds			
1947: Average	\$55.57	44.6	\$1,246	\$47.54	45.8	\$1,038	\$41.33	39.7	\$1,041	\$51.96	45.7	\$1,137	\$56.11	49.0	\$1,145	\$46.38	44.6	\$1,040	
1948: Average	59.15	43.4	1,363	52.26	45.4	1,151	42.63	38.2	1,116	\$4.53	44.3	1,251	57.23	46.3	1,236	51.01	45.3	1,126	
1949: January	60.34	43.1	1,400	54.34	44.8	1,213	42.61	36.8	1,158	57.19	44.2	1,294	61.84	46.6	1,327	52.19	44.8	1,165	
February	55.69	40.3	1,382	53.77	44.4	1,211	42.89	37.2	1,153	55.21	43.1	1,281	55.42	43.4	1,277	53.78	45.5	1,182	
March	55.32	39.8	1,390	54.10	44.6	1,213	43.07	36.5	1,180	54.66	42.7	1,280	54.36	42.7	1,273	55.07	46.2	1,192	
April	56.64	40.6	1,395	54.47	45.2	1,205	43.65	37.4	1,167	55.81	43.6	1,280	55.90	43.6	1,282	55.88	47.2	1,184	
May	56.44	40.4	1,397	55.23	45.8	1,206	42.63	38.3	1,113	57.84	44.7	1,294	58.10	45.0	1,291	57.36	47.6	1,205	
June	58.55	41.7	1,409	55.71	45.7	1,219	43.59	39.7	1,098	59.75	45.4	1,316	61.13	46.1	1,326	57.14	47.7	1,198	
July	57.34	40.9	1,402	54.72	45.0	1,216	44.27	40.8	1,085	57.46	44.0	1,306	58.70	44.3	1,325	55.75	46.3	1,204	
August	58.31	41.5	1,405	55.28	44.4	1,245	44.79	40.1	1,117	58.92	44.3	1,338	62.70	45.8	1,369	56.57	47.1	1,201	
September	56.89	40.9	1,394	54.76	44.2	1,239	45.92	40.0	1,148	58.56	44.4	1,319	62.88	46.0	1,367	55.67	46.7	1,192	
October	61.03	42.8	1,426	53.95	43.9	1,229	41.29	37.1	1,113	58.81	42.8	1,304	57.77	43.4	1,331	54.49	45.6	1,195	
November	62.07	43.5	1,427	54.34	44.0	1,235	43.26	36.6	1,182	58.85	43.2	1,316	59.67	44.1	1,353	54.22	45.3	1,197	
December	61.29	43.1	1,422	56.04	44.8	1,251	45.19	38.2	1,183	56.19	42.7	1,316	59.84	44.0	1,360	52.98	44.3	1,196	

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																			
	Food and kindred products—Continued																			
	Bakery products			Sugar			Confectionery and related products			Confectionery			Beverages			Bottled soft drinks				
	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings		
1947: Average.....	\$45.41	42.4	\$1.071	\$49.17	43.4	\$1.123	\$41.04	40.0	\$1.026	\$39.18	39.7	\$0.987	\$57.60	42.6	\$1.352	\$44.82	43.9	\$1.021		
1948: Average.....	49.38	42.4	1.164	52.04	41.8	1.245	44.00	40.0	1.100	41.46	39.6	1.047	61.43	41.9	1.466	46.26	44.1	1.049		
1949: January.....	49.82	40.9	1.218	55.04	42.4	1.296	44.70	39.7	1.126	42.28	39.4	1.073	60.90	40.2	1.515	45.82	42.5	1.078		
February.....	51.28	42.1	1.218	54.95	40.2	1.367	43.88	39.0	1.125	41.86	38.9	1.076	61.54	40.3	1.527	47.05	43.4	1.084		
March.....	50.34	41.4	1.216	53.40	39.5	1.352	44.60	39.5	1.129	42.48	39.3	1.081	62.75	40.8	1.538	46.89	43.3	1.083		
April.....	51.07	42.0	1.216	51.45	37.8	1.261	42.71	37.9	1.127	40.56	37.8	1.073	62.20	40.9	1.523	47.09	43.2	1.080		
May.....	51.61	42.1	1.226	55.08	40.5	1.360	42.86	38.1	1.125	40.60	37.8	1.074	64.54	41.8	1.544	48.58	44.0	1.104		
June.....	52.29	42.2	1.239	57.93	42.5	1.363	44.76	39.3	1.139	42.38	39.2	1.081	65.59	42.1	1.558	50.20	44.9	1.118		
July.....	52.62	42.5	1.247	57.72	42.5	1.358	43.69	38.8	1.126	41.39	38.9	1.068	68.79	42.7	1.611	50.69	44.9	1.129		
August.....	51.83	41.5	1.249	56.53	41.2	1.372	45.39	40.2	1.129	42.80	40.0	1.070	66.24	41.4	1.600	49.88	44.1	1.131		
September.....	52.88	42.1	1.256	55.17	43.6	1.357	47.70	42.1	1.131	44.03	41.3	1.066	64.92	40.7	1.590	48.32	43.3	1.116		
October.....	52.29	41.6	1.257	53.71	42.9	1.252	48.52	42.6	1.139	44.83	41.7	1.075	64.40	40.5	1.560	49.37	45.0	1.097		
November.....	52.12	41.4	1.259	60.82	48.0	1.267	45.66	40.8	1.124	43.44	40.9	1.062	63.60	40.1	1.586	48.24	43.7	1.104		
December.....	52.08	41.3	1.261	55.25	42.6	1.297	45.50	40.7	1.118	43.17	40.8	1.058	63.28	39.7	1.594	46.01	41.9	1.098		
1950: January.....	52.15	41.0	1.272	56.36	39.9	1.410	45.20	40.0	1.130	42.79	39.8	1.075	64.00	39.8	1.608	46.60	42.6	1.094		
Manufacturing—Continued																				
Food and kindred products—Continued																				
Malt liquors			Distilled, rectified, and blended liquors			Miscellaneous food products			Total: Tobacco manufactures			Cigarettes			Cigars					
1947: Average.....	\$63.03	43.2	\$1.459	\$49.37	40.8	\$1.210	\$47.87	43.2	\$1.108	\$35.26	38.7	\$0.911	\$42.40	40.0	\$1.060	\$32.42	37.7	\$0.860		
1948: Average.....	66.40	42.0	1.581	54.92	40.5	1.356	49.74	42.3	1.176	36.50	38.1	1.058	44.51	38.6	1.153	32.71	37.6	.870		
1949: January.....	64.68	40.9	1.617	56.58	39.3	1.439	51.91	41.9	1.259	35.69	36.2	.984	43.20	35.5	1.217	32.62	37.2	.877		
February.....	66.21	40.3	1.643	54.80	38.7	1.416	52.00	41.6	1.250	34.94	35.4	.987	42.52	34.8	1.214	31.82	37.8	.874		
March.....	67.98	41.1	1.654	55.15	38.0	1.414	51.42	41.7	1.233	36.21	36.1	1.013	43.77	37.1	1.216	31.12	35.6	.884		
April.....	67.44	41.2	1.637	55.29	38.8	1.425	50.55	40.8	1.235	35.15	34.1	1.013	44.01	35.9	1.228	31.78	35.6	.881		
May.....	70.85	42.5	1.667	55.39	38.9	1.428	51.71	41.8	1.240	35.27	34.7	1.016	43.98	35.9	1.229	31.63	35.7	.886		
June.....	71.74	42.5	1.688	55.11	38.1	1.424	51.41	41.8	1.230	35.87	38.0	1.016	47.78	39.1	1.222	32.99	37.4	.882		
July.....	75.66	43.3	1.746	60.42	39.1	1.443	52.23	42.3	1.257	38.19	37.4	1.021	48.13	39.1	1.231	32.13	36.6	.878		
August.....	72.62	41.7	1.727	57.14	38.9	1.439	53.04	42.5	1.248	38.68	38.7	0.997	48.90	39.5	1.238	32.81	37.2	.882		
September.....	69.46	40.5	1.704	60.18	40.2	1.497	52.56	42.2	1.244	38.39	38.9	0.987	47.02	38.9	1.232	33.71	38.0	.887		
October.....	69.33	40.1	1.729	58.30	39.5	1.478	53.58	42.5	1.256	37.86	38.2	0.991	47.63	37.9	1.233	33.45	37.8	.885		
November.....	67.52	39.3	1.718	62.28	41.3	1.508	53.13	42.1	1.262	38.46	38.0	1.012	47.81	38.9	1.229	34.16	38.0	.890		
December.....	68.18	39.8	1.713	56.77	38.0	1.494	53.00	42.0	1.262	38.93	38.2	1.019	48.53	38.7	1.254	32.96	37.2	.886		
1950: January.....	68.43	39.6	1.728	58.91	39.3	1.490	52.74	41.4	1.274	39.22	38.0	1.032	49.15	39.1	1.257	33.38	36.6	.912		
Manufacturing—Continued																				
Tobacco manufactures—Continued										Textile-mill products										
Tobacco and snuff			Tobacco stemming and redrying			Total: Textile-mill products			Yarn and thread mills			Yarn mills			Broad-woven fabric mills					
1947: Average.....	\$35.29	36.4	\$0.919	\$32.24	40.4	\$0.798	\$41.26	39.6	\$1.042	\$37.99	38.8	\$0.979	\$38.00	38.7	\$0.982	\$41.52	40.0	\$1.038		
1948: Average.....	37.21	37.1	.987	34.24	40.0	.956	45.59	39.2	1.163	41.49	38.1	1.089	41.42	37.9	1.093	46.13	39.6	1.165		
1949: January.....	37.02	36.4	1.017	29.26	33.1	.884	44.89	37.5	1.197	39.32	35.3	1.114	39.39	35.2	1.119	44.79	37.7	1.188		
February.....	37.09	35.8	1.036	30.68	34.4	.892	45.01	37.7	1.194	39.77	35.8	1.111	39.99	35.8	1.117	44.83	37.8	1.186		
March.....	38.02	36.7	1.036	33.51	37.8	.934	44.19	37.2	1.188	39.21	35.2	1.114	39.05	34.9	1.119	45.28	36.8	1.176		
April.....	36.82	35.2	1.046	34.02	35.4	.961	42.20	35.7	1.182	37.85	34.1	1.110	37.99	34.1	1.114	41.08	35.2	1.167		
May.....	37.35	35.5	1.052	34.55	35.0	.987	41.91	35.4	1.184	37.56	33.9	1.108	37.66	33.9	1.111	46.52	34.6	1.171		
June.....	40.30	38.2	1.055	38.14	38.1	1.001	42.98	36.3	1.184	39.10	35.1	1.114	39.32	35.2	1.117	42.09	35.7	1.179		
July.....	40.02	37.4	1.070	36.22	36.4	.995	43.26	36.6	1.182	39.73	35.6	1.116	39.54	35.6	1.119	42.87	36.3	1.181		
August.....	40.35	38.1	1.059	36.59	42.9	.853	44.37	37.6	1.180	40.33	36.5	1.105	40.33	36.4	1.108	44.41	37.6	1.181		
September.....	40.92	38.1	1.074	34.47	42.3	.815	45.82	38.6	1.187	42.07	37.9	1.110	41.88	37.7	1.111	45.74	38.5	1.188		
October.....	39.81	37.7	1.056	33.82	40.5	.835	47.04	38.4	1.194	43.00	38.5	1.117	42.97	38.4	1.119	47.52	38.6	1.200		
November.....	39.76	37.4	1.063	32.24	36.1	.893	47.20	39.5	1.195	43.46	38.8	1.120	43.46	38.7	1.123	47.76	39.8	1.200		
December.....	41.46	38.6	1.074	36.80	40.4	.911	47.64	39.8	1.197	44.08	39.5	1.116	43.98	39.3	1.119	48.40	40.3	1.201		
1950: January.....	40.58	37.4	1.085	37.81	42.1	.898	47.40	39.4	1.203	43.67	39.2	1.114	43.56	39.0	1.117	48.20	40.0	1.205		

See footnote at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Textile-mill products—Continued																	
	Cotton, silk, synthetic fiber ²			Woolen and worsted			Knitting mills			Full-fashioned hosiery ³			Seamless hosiery ³			Knit outerwear		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. brly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. brly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. brly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. brly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. brly. earnings	Avg. wkly. hours	Avg. brly. earnings	
1947: Average	\$40.30	40.1	\$1,005	\$46.28	40.0	\$1,157	\$37.78	37.9	\$0.997	\$46.92	38.3	\$1,225	\$20.68	38.2	\$0.820	\$37.73	38.0	\$0.903
1948: Average	44.36	39.4	1,126	52.45	40.1	1,308	41.14	37.5	1,097	52.85	38.8	1,362	30.27	35.2	1,060	39.75	38.0	1,046
1949: January	42.97	37.3	1,152	52.11	39.3	1,326	40.88	35.7	1,145	52.05	37.1	1,403	30.13	33.7	.894	41.82	38.4	1,089
February	43.28	37.5	1,154	51.43	39.2	1,312	41.09	36.3	1,132	51.66	37.3	1,385	30.94	35.0	.884	41.24	37.8	1,091
March	42.13	36.7	1,148	48.30	37.1	1,302	41.39	36.5	1,134	51.72	37.4	1,383	30.74	34.7	.886	41.27	38.0	1,086
April	40.08	35.1	1,142	46.58	36.0	1,294	39.87	35.1	1,136	50.31	36.3	1,386	30.31	34.1	.889	39.20	35.6	1,101
May	39.02	34.2	1,141	47.88	36.8	1,301	40.07	35.3	1,135	50.87	36.6	1,390	29.57	33.6	.890	40.80	37.4	1,091
June	39.78	34.8	1,143	51.64	39.3	1,314	40.73	36.2	1,125	51.76	36.9	1,385	30.50	34.7	.879	40.76	37.6	1,076
July	40.46	35.4	1,143	52.23	36.7	1,318	40.44	36.3	1,114	50.26	36.5	1,377	30.61	35.2	.864	39.60	38.6	1,068
August	42.71	37.1	1,148	50.2	36.0	1,301	41.11	37.0	1,111	51.66	36.5	1,381	30.40	35.8	.877	39.61	37.8	1,048
September	44.24	38.3	1,155	51.94	50.5	1,315	42.22	37.8	1,117	52.72	38.2	1,360	31.86	36.0	.885	40.69	38.5	1,057
October	46.09	39.9	1,164	53.25	38.8	1,328	43.68	38.9	1,123	55.02	39.5	1,393	33.76	37.8	.893	42.51	39.8	1,068
November	46.56	39.9	1,167	52.51	38.6	1,326	43.28	38.4	1,127	54.96	39.1	1,403	33.68	37.5	.896	42.34	39.5	1,072
December	47.19	40.4	1,168	53.53	40.2	1,332	42.30	37.6	1,125	53.07	37.8	1,404	33.33	37.2	.896	41.27	38.5	1,072
1950: January	47.12	40.1	1,175	53.17	39.8	1,336	41.80	36.8	1,136	51.64	36.7	1,407	33.12	36.4	.910	41.20	37.8	1,092
Manufacturing—Continued																		
Textile-mill products—Continued																		
Knit underwear			Dyeing and finishing textiles			Carpets, rugs, other floor coverings			Wool carpets, rugs, and carpet yarn			Other textile-mill products			Fur-felt hats and hat bodies			
1947: Average	\$35.36	38.9	\$0.909	\$47.03	41.8	\$1,125	\$49.93	41.3	\$1,209	\$50.35	41.2	\$1,222	\$44.07	40.1	\$1,099	\$47.01	36.9	\$1,274
1948: Average	37.40	37.7	.992	51.00	41.0	1,244	58.13	42.0	1,384	58.09	41.7	1,393	47.96	39.7	1,208	49.17	38.5	1,347
1949: January	34.41	33.9	1,015	51.11	39.9	1,281	60.01	41.5	1,446	50.84	40.9	1,463	47.91	38.7	1,228	51.31	36.6	1,402
February	35.18	34.0	1,008	52.40	41.0	1,283	59.53	40.9	1,456	50.47	40.1	1,458	47.97	38.0	1,220	50.77	37.3	1,388
March	36.09	35.1	1,011	52.46	41.0	1,282	58.96	40.6	1,452	50.81	40.2	1,463	47.37	38.8	1,221	49.09	35.7	1,375
April	33.63	33.5	1,004	50.47	39.4	1,281	43.49	38.0	1,439	53.47	36.9	1,449	45.81	37.7	1,215	41.44	29.9	1,386
May	34.04	33.8	1,007	49.49	38.6	1,282	55.29	35.8	1,436	54.58	37.8	1,444	46.81	37.9	1,220	47.81	34.3	1,394
June	35.80	35.8	1,000	49.92	39.4	1,267	51.98	36.5	1,424	49.69	34.7	1,432	47.39	38.4	1,234	52.67	37.3	1,412
July	36.00	36.0	1,000	49.76	37.8	1,260	53.73	37.9	1,419	51.98	36.4	1,428	47.60	38.5	1,238	52.58	37.4	1,412
August	36.85	37.0	.996	50.50	39.9	1,269	54.14	38.1	1,421	53.24	37.1	1,435	47.48	38.6	1,230	50.41	36.4	1,385
September	38.85	37.0	1,002	52.31	40.8	1,282	56.10	39.2	1,431	55.40	38.1	1,454	49.58	39.9	1,242	49.49	35.5	1,394
October	38.78	38.7	1,002	52.69	41.2	1,279	57.26	39.9	1,435	57.31	39.2	1,462	48.87	39.6	1,234	45.55	33.3	1,368
November	37.71	37.6	1,003	52.91	41.3	1,281	58.57	40.7	1,439	58.67	40.1	1,463	48.18	39.2	1,229	45.86	32.9	1,394
December	37.07	37.0	1,002	53.84	41.9	1,285	60.11	41.4	1,452	60.54	41.1	1,473	49.64	40.1	1,238	50.55	35.7	1,416
1950: January	37.21	36.7	1,014	52.07	40.3	1,292	60.30	41.3	1,460	60.95	41.1	1,483	49.64	39.9	1,244	53.44	37.5	1,425
Manufacturing—Continued																		
Apparel and other finished textile products																		
Total: Apparel and other finished textile products			Men's and boys' suits and coats			Men's and boys' furnishings and work clothing			Shirts, collars, and nightwear			Separate trousers			Work shirts			
1947: Average	\$40.84	36.3	\$1,125	\$48.26	37.7	\$1,280	\$31.99	36.6	\$0.874	\$32.50	37.1	\$0.876	\$34.53	36.7	\$0.941	\$25.64	34.6	\$0.741
1948: Average	42.79	36.2	1,182	50.11	36.6	1,369	53.20	36.2	.917	53.50	36.1	.926	35.31	35.7	.989	26.49	35.7	.742
1949: January	43.10	35.3	1,221	48.07	38.4	1,358	52.08	34.2	.937	51.66	33.5	.946	34.73	34.8	.968	26.85	33.9	.792
February	43.87	36.2	1,212	49.42	36.5	1,354	52.89	35.6	.924	52.79	35.3	.929	35.27	36.7	.988	27.36	35.3	.775
March	43.41	36.3	1,196	50.13	36.7	1,366	53.82	36.4	.929	53.98	36.3	.936	36.96	37.0	.969	28.02	36.8	.784
April	39.53	34.4	1,149	46.30	34.5	1,342	52.49	35.2	.923	53.03	34.4	.934	36.21	35.6	.988	26.15	34.6	.778
May	39.94	35.5	1,123	46.00	34.2	1,345	53.89	35.1	.924	54.06	35.5	.934	36.57	37.0	.983	26.91	33.9	.786
June	40.75	35.4	1,132	48.80	34.3	1,311	54.06	36.6	.925	54.56	35.6	.937	34.54	35.3	.979	26.80	34.9	.798
July	41.03	35.1	1,149	54.24	34.6	1,306	55.03	36.1	.915	52.68	34.8	.939	32.56	33.4	.948	27.60	35.7	.773
August	41.95	35.7	1,175	44.96	33.5	1,342	52.80	36.4	.901	52.02	35.7	.937	34.63	35.7	.970	27.33	36.1	.757
September	44.01	36.8	1,196	47.90	35.4	1,353	53.87	36.9	.918	53.21	36.3	.915	35.79	36.6	.978	28.19	36.7	.768
October	42.63	36.5	1,108	46.20	34.3	1,347	54.35	37.5	.916	54.30	36.4	.917	34.13	35.4	.964	28.27	37.1	.762
November	40.38	35.7	1,131	44.48	32.9	1,352	52.82	36.8	.919	54.78	37.6	.925	33.60	34.6	.971	28.22	36.7	.769
December	42.05	36.0	1,168	46.88	34.7	1,351	53.73	36.7	.919	54.52	37.2	.928	34.14	35.3	.967	27.91	35.6	.784
1950: January	42.84	36.0	1,190	48.45	35.6	1,361	53.44	36.0	.929	53.56	35.7	.940	36.20	36.6	.989	28.03	35.6	.788

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Apparel and other finished textile products—Continued																	
	Women's outerwear			Women's dresses			Household apparel			Women's suits, coats, and skirts			Women's and children's undergarments			Underwear and nightwear, except corsets		
	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings
1947: Average.....	\$40.60	35.0	\$1.417	\$46.65	34.5	\$1.355	\$30.06	35.7	\$0.842	\$65.36	35.0	\$1.953	\$33.62	36.9	\$0.911	\$32.44	36.2	\$0.906
1948: Average.....	51.49	35.1	1.467	48.72	34.8	1.400	31.59	36.1	.775	70.60	35.0	2.017	35.32	36.6	.965	34.12	36.3	.940
1949: January.....	53.81	35.1	1.523	48.63	34.2	1.422	31.88	35.7	.893	75.71	35.4	2.080	35.17	36.0	.977	33.57	35.6	.943
February.....	53.84	35.8	1.504	48.44	35.0	1.384	32.78	37.0	.886	75.82	36.7	2.066	35.55	36.2	.962	33.93	35.9	.945
March.....	51.68	35.4	1.490	48.53	35.8	1.367	35.49	37.5	.893	75.46	34.0	2.043	35.82	36.4	.954	34.44	35.4	.934
April.....	55.42	35.4	1.500	48.58	34.1	1.382	31.81	35.6	.886	74.49	35.7	1.903	33.06	32.8	.978	31.50	34.6	.943
May.....	55.61	35.6	1.500	48.66	35.2	1.382	34.66	36.1	.907	74.29	30.6	1.713	34.57	35.6	.971	32.67	34.9	.936
June.....	53.83	35.8	1.519	48.69	35.8	1.388	34.00	37.3	.886	66.61	32.8	1.709	35.72	36.3	.973	33.10	35.4	.935
July.....	48.51	33.9	1.431	42.66	32.2	1.285	30.71	35.1	.875	66.05	34.1	1.957	34.52	36.0	.959	32.25	34.9	.934
August.....	50.49	34.4	1.445	46.71	34.1	1.355	30.85	35.8	.874	67.61	34.3	1.971	35.48	36.8	.964	33.54	34.6	.929
September.....	53.13	35.8	1.484	50.20	35.4	1.418	33.08	37.8	.875	69.73	35.2	1.981	37.24	38.0	.980	35.25	37.2	.949
October.....	49.49	34.2	1.447	46.68	33.7	1.304	31.45	35.9	.876	64.88	33.0	1.666	38.10	38.6	.987	36.25	38.1	.952
November.....	45.80	33.6	1.363	44.99	32.3	1.351	31.90	36.5	.574	58.33	30.6	1.908	37.45	38.1	.963	36.27	38.1	.952
December.....	49.58	34.6	1.433	47.82	34.6	1.382	31.52	36.1	.873	62.90	33.3	1.919	36.48	37.0	.965	34.56	35.3	.952
1950: January.....	51.09	34.9	1.464	48.30	34.7	1.392	31.45	35.1	.896	67.36	34.9	1.930	36.72	36.9	.965	35.03	35.8	.962
Manufacturing—Continued																		
Apparel and other finished textile products—Continued																		
Millinery			Children's outerwear			Fur goods and miscellaneous apparel			Other fabricated textile products			Total: Lumber and wood products (except furniture)			Lumber and wood products (except furniture)			
Millinery			Children's outerwear			Fur goods and miscellaneous apparel			Other fabricated textile products			Total: Lumber and wood products (except furniture)			Logging camps and contractors			
1947: Average.....	\$47.03	35.2	\$1.336	\$34.33	36.1	\$0.951	\$39.93	36.8	\$1.065	\$35.57	37.6	\$0.946	\$47.36	41.8	\$1.133	\$45.15	38.3	\$1.440
1948: Average.....	50.23	34.8	1.443	56.72	36.5	1.006	42.21	38.7	1.150	38.49	38.0	1.013	51.38	41.5	1.228	60.26	38.7	1.557
1949: January.....	50.96	34.5	1.477	59.95	35.9	1.057	39.56	32.1	1.124	39.09	37.8	1.034	49.82	40.7	1.224	55.22	37.9	1.487
February.....	58.64	37.4	1.568	58.51	36.3	1.061	41.30	36.2	1.141	39.84	38.2	1.043	48.03	39.5	1.216	48.12	35.2	1.367
March.....	62.29	36.1	1.293	58.47	36.6	1.051	40.20	35.8	1.123	39.31	37.8	1.040	60.21	40.3	1.246	58.18	38.3	1.519
April.....	52.49	34.9	1.504	53.23	33.7	.986	37.38	32.7	1.143	38.90	37.3	1.043	51.52	40.5	1.272	62.76	38.5	1.630
May.....	46.48	31.9	1.457	55.14	36.0	1.074	40.14	34.1	1.177	39.97	38.1	1.049	52.94	41.1	1.288	64.76	40.5	1.599
June.....	46.05	31.7	1.453	36.04	35.9	1.004	42.28	35.2	1.201	40.52	38.3	1.058	52.91	40.7	1.300	64.94	40.0	1.624
July.....	51.35	34.6	1.484	37.09	36.8	1.006	42.18	35.0	1.205	39.61	37.8	1.048	60.75	39.4	1.288	60.20	37.6	1.601
August.....	54.40	36.1	1.507	37.38	36.9	1.013	42.54	36.3	1.172	39.77	38.2	1.041	52.87	40.7	1.299	67.16	41.1	1.634
September.....	64.40	39.8	1.618	38.18	37.1	1.029	44.35	37.3	1.189	40.84	38.8	1.053	52.53	40.7	1.298	64.08	40.0	1.602
October.....	53.68	35.6	1.508	37.75	36.9	1.023	45.31	38.4	1.180	40.62	39.1	1.039	54.17	41.7	1.269	65.00	40.6	1.601
November.....	43.81	26.5	1.485	36.89	36.6	1.006	43.85	37.7	1.163	38.73	37.9	1.022	52.48	41.0	1.280	61.58	38.2	1.571
December.....	52.06	35.2	1.479	37.10	36.3	1.022	43.51	36.9	1.179	39.21	37.7	1.040	52.66	41.3	1.275	62.28	38.9	1.561
1950: January.....	56.76	37.1	1.530	38.18	36.4	1.040	40.24	35.8	1.124	40.94	38.3	1.069	48.18	39.3	1.226	49.24	36.8	1.338
Manufacturing—Continued																		
Lumber and wood products (except furniture)—Continued																		
Sawmills and planing mills			Sawmills and planing mills, general ⁴			Millwork, plywood, and prefabricated structural wood products			Millwork			Wooden containers			Wooden boxes, other than cigar			
Sawmills and planing mills			Sawmills and planing mills, general ⁴			Millwork, plywood, and prefabricated structural wood products			Millwork			Wooden containers			Wooden boxes, other than cigar			
1947: Average.....	\$47.88	42.0	\$1.140	\$48.55	42.0	\$1.156	\$49.65	43.4	\$1.144	\$47.67	43.1	\$1.106	\$39.08	41.8	\$0.935	\$39.58	42.7	\$0.927
1948: Average.....	51.53	41.5	1.249	51.57	41.4	1.253	54.95	45.3	1.209	53.40	43.2	1.236	41.57	41.4	1.004	42.39	42.1	1.007
1949: January.....	50.59	40.8	1.240	51.20	40.7	1.258	53.20	41.4	1.285	53.47	42.3	1.264	40.84	40.8	1.001	40.91	41.2	.953
February.....	48.73	39.3	1.240	49.27	39.2	1.257	53.02	41.1	1.290	52.63	41.7	1.262	40.48	40.4	1.002	40.54	40.7	.956
March.....	50.85	40.2	1.265	51.50	40.2	1.281	53.69	41.3	1.300	52.37	41.4	1.265	40.62	40.7	.998	40.37	40.9	.987
April.....	52.29	40.6	1.288	52.98	40.6	1.305	54.62	41.6	1.313	52.62	41.3	1.274	40.52	40.2	1.008	40.80	40.6	1.005
May.....	53.76	41.1	1.308	54.42	41.1	1.324	55.09	41.8	1.318	53.29	41.7	1.278	41.66	40.8	1.021	42.11	41.0	1.027
June.....	53.56	40.7	1.316	54.21	40.7	1.332	55.22	41.8	1.321	54.06	41.2	1.284	42.19	40.3	1.047	42.82	40.7	1.052
July.....	51.25	39.3	1.304	51.88	39.3	1.320	52.74	40.2	1.312	53.19	41.2	1.291	42.40	40.3	1.052	43.31	40.9	1.059
August.....	53.53	40.8	1.312	54.14	40.8	1.327	54.19	41.3	1.312	53.71	41.7	1.288	42.03	39.8	1.056	42.91	40.1	1.070
September.....	53.35	40.6	1.314	54.04	40.6	1.331	55.66	42.1	1.322	54.91	42.4	1.295	43.04	40.6	1.060	43.89	41.1	1.068
October.....	54.54	41.6	1.311	55.29	41.6	1.329	57.68	43.3	1.332	56.51	43.4	1.302	43.38	41.2	1.053	44.73	41.8	1.070
November.....	52.89	41.0	1.290	53.63	41.0	1.308	56.18	42.4	1.325	55.94	42.9	1.304	42.02	40.4	1.040	42.92	40.8	1.049
December.....	52.31	40.8	1.282	53.04	40.8	1.300	58.92	44.2	1.333	57.86	44.1	1.312	43.41	41.3	1.051	44.02	41.8	1.053
1950: January.....	47.65	38.4	1.241	48.35	38.4	1.259	56.36	42.6	1.323	55.90	42.8	1.306	41.23	39.8	1.036	41.96	40.5	1.036

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Lumber and wood products (except furniture)—Con.			Furniture and fixtures												Mattresses and bed-springs		
	Miscellaneous wood products			Total: Furniture and fixtures			Household furniture			Wood household furniture, except upholstered			Wood household furniture, upholstered			Mattresses and bed-springs		
	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. hrly. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings
1947: Average.....	\$41.22	42.1	\$0.979	\$45.64	41.6	\$1.097	\$44.01	41.6	\$1.058	\$41.19	41.9	\$0.983	\$47.23	40.4	\$1.169	\$48.94	41.3	\$1.185
1948: Average.....	44.06	42.0	1.049	45.99	41.1	1.192	46.76	40.8	1.146	43.84	41.2	1.064	50.33	40.1	1.255	50.85	40.1	1.268
1949: January.....	44.70	41.7	1.072	48.34	39.4	1.227	45.40	38.7	1.173	43.06	39.4	1.063	48.96	36.6	1.283	48.38	37.5	1.290
February.....	44.47	41.6	1.069	48.99	39.8	1.231	46.22	39.3	1.176	43.24	39.6	1.062	47.43	37.2	1.275	51.43	39.5	1.302
March.....	44.23	41.3	1.071	48.87	39.6	1.234	46.37	39.3	1.180	43.22	39.4	1.097	47.96	37.5	1.279	51.40	39.6	1.298
April.....	44.49	41.0	1.070	47.60	38.7	1.230	45.08	38.3	1.177	41.68	38.2	1.091	47.82	37.3	1.262	49.67	38.5	1.290
May.....	44.08	40.7	1.083	47.59	38.5	1.236	44.92	38.0	1.182	41.54	37.9	1.096	46.54	36.5	1.275	49.43	38.2	1.294
June.....	43.68	40.0	1.062	48.36	39.0	1.240	45.70	38.6	1.184	42.09	38.4	1.096	47.39	37.2	1.274	52.00	40.0	1.300
July.....	43.02	39.4	1.032	47.86	38.6	1.240	44.80	38.0	1.179	41.06	37.7	1.069	46.87	36.7	1.277	51.21	39.7	1.290
August.....	43.52	40.0	1.088	49.69	40.4	1.230	47.23	40.3	1.172	43.17	40.2	1.074	49.82	39.2	1.271	53.94	41.4	1.303
September.....	43.96	40.0	1.059	50.72	41.0	1.237	47.48	41.1	1.186	44.17	40.9	1.080	52.07	40.3	1.292	57.13	42.6	1.341
October.....	45.14	41.0	1.101	51.42	41.7	1.233	49.74	41.9	1.187	46.15	42.3	1.091	53.83	41.5	1.297	54.18	41.2	1.315
November.....	44.96	40.8	1.102	50.72	41.2	1.231	48.86	41.3	1.188	46.60	42.4	1.099	55.53	42.1	1.319	45.97	36.4	1.263
December.....	44.54	40.9	1.089	52.45	42.1	1.246	50.89	42.3	1.203	47.14	42.7	1.106	57.63	43.3	1.333	53.80	40.6	1.325
1950: January.....	43.89	40.3	1.089	51.25	41.2	1.244	49.52	41.3	1.199	46.17	41.9	1.162	52.61	40.1	1.312	53.99	40.2	1.343
Manufacturing—Continued																		
Furniture and fixtures—Continued			Paper and allied products												Printing, publishing, and allied industries			
Other furniture and fixtures			Total: Paper and allied products			Pulp, paper, and paperboard mills			Paperboard containers and boxes			Other paper and allied products			Total: Printing, publishing, and allied industries			
1947: Average.....	\$50.25	41.7	\$1.205	\$50.21	43.1	\$1.165	\$54.10	44.2	\$1.224	\$46.24	42.0	\$1.101	\$45.74	41.7	\$1.097	\$60.75	40.1	\$1.515
1948: Average.....	54.59	41.7	1.309	53.25	42.8	1.291	59.88	44.0	1.361	54.96	41.7	1.222	49.48	41.3	1.198	65.73	39.3	1.698
1949: January.....	55.88	41.3	1.353	55.54	41.6	1.235	59.91	42.7	1.403	50.29	40.1	1.254	51.07	40.6	1.258	67.59	38.6	1.751
February.....	55.90	41.1	1.365	54.84	41.2	1.331	58.72	42.0	1.398	50.08	40.0	1.252	51.12	40.7	1.256	68.32	38.6	1.770
March.....	55.11	40.4	1.364	54.45	41.0	1.328	58.17	41.7	1.395	49.95	39.9	1.252	50.58	40.4	1.252	69.56	38.6	1.802
April.....	53.74	39.6	1.357	53.48	40.3	1.327	57.35	41.2	1.392	48.81	38.8	1.250	49.84	40.0	1.246	69.39	38.4	1.807
May.....	54.13	39.8	1.360	53.73	40.4	1.330	57.58	41.1	1.401	49.49	39.4	1.256	49.51	39.8	1.244	70.40	38.7	1.819
June.....	54.86	40.1	1.368	54.54	40.7	1.340	57.95	41.1	1.410	51.38	40.3	1.275	50.13	40.2	1.247	70.47	38.7	1.821
July.....	55.44	40.2	1.379	55.57	41.1	1.352	59.65	41.8	1.427	51.63	40.4	1.278	50.90	40.4	1.260	70.45	38.6	1.825
August.....	55.94	40.8	1.371	56.26	41.8	1.346	60.32	42.6	1.416	53.00	41.5	1.277	50.82	40.3	1.261	70.69	38.5	1.836
September.....	55.91	40.9	1.367	57.64	42.6	1.353	61.06	43.0	1.420	55.30	42.9	1.289	52.49	41.3	1.271	72.02	39.1	1.842
October.....	55.91	41.2	1.357	58.36	43.1	1.354	62.10	43.7	1.421	56.20	43.5	1.292	52.54	41.4	1.269	71.22	38.6	1.845
November.....	55.90	41.1	1.360	58.31	43.0	1.356	62.00	43.6	1.424	56.20	43.5	1.292	52.11	41.0	1.271	70.91	38.6	1.837
December.....	56.61	41.5	1.364	57.99	42.9	1.355	62.09	43.6	1.424	55.17	42.8	1.289	52.03	41.1	1.266	72.54	39.4	1.841
1950: January.....	56.18	41.1	1.367	57.52	42.2	1.363	61.49	43.0	1.430	53.78	41.5	1.296	52.82	41.3	1.279	70.43	38.4	1.834
Manufacturing—Continued																		
Printing, publishing, and allied industries—Continued																		
Newspapers			Periodicals			Books			Commercial printing			Lithographing			Other printing and publishing			
1947: Average.....	\$65.78	37.5	\$1.754	\$67.30	43.0	\$1.563	\$54.06	40.4	\$1.338	\$60.65	41.2	\$1.472	\$59.08	41.4	\$1.427	\$55.32	40.0	\$1.383
1948: Average.....	74.00	37.6	1.908	69.55	40.6	1.713	57.43	38.7	1.484	66.33	40.3	1.646	64.15	39.5	1.624	59.93	39.3	1.525
1949: January.....	74.83	36.9	2.028	67.40	38.6	1.746	58.33	37.9	1.639	67.77	40.1	1.690	64.45	38.0	1.606	61.43	39.0	1.575
February.....	75.65	37.1	2.059	69.70	39.2	1.778	59.21	38.4	1.542	67.91	39.6	1.715	55.70	38.4	1.711	61.98	39.0	1.589
March.....	76.72	37.1	2.068	70.67	39.0	1.812	60.53	38.7	1.664	69.26	39.6	1.749	67.14	38.7	1.735	63.14	39.0	1.619
April.....	78.43	37.6	2.086	69.61	38.8	1.764	60.68	38.7	1.568	68.42	39.3	1.741	66.14	37.9	1.745	61.56	38.0	1.620
May.....	78.73	37.4	2.105	68.91	38.8	1.776	59.50	37.8	1.578	70.80	40.0	1.749	68.87	39.0	1.766	61.75	38.4	1.608
June.....	78.73	37.4	2.105	70.21	38.6	1.819	59.87	38.2	1.631	70.58	39.8	1.769	67.55	38.6	1.769	62.99	38.4	1.625
July.....	78.02	37.1	2.103	70.21	38.6	1.819	59.87	38.2	1.631	70.58	39.8	1.769	67.55	38.6	1.769	62.99	38.4	1.625
August.....	77.80	36.8	2.114	70.49	39.0	1.812	60.00	38.1	1.619	70.66	39.6	1.759	67.22	39.5	1.803	63.24	38.4	1.647
September.....	80.14	37.5	2.137	71.20	39.0	1.835	65.67	40.3	1.617	72.22	39.9	1.760	73.71	40.7	1.811	63.09	38.8	1.626
October.....	80.06	37.5	2.138	71.00	38.8	1.830	62.48	39.0	1.602	69.84	39.5	1.768	73.12	40.6	1.807	62.05	37.7	1.646
November.....	79.05	37.2	2.128	70.21	38.6	1.819	61.05	37.8	1.615	69.36	39.3	1.765	72.36	40.7	1.778	63.73	39.0	1.634
December.....	82.15	38.3	2.145	70.67	38.7	1.826	61.73	38.5	1.604	71.13	40.3	1.765	70.90	40.7	1.742	64.75	39.6	1.635
1950: January.....	76.27	36.3	2.101	69.98	38.6	1.813	61.52	38.0	1.619	70.80	40.0	1.770	68.52	38.3	1.780	64.51	39.0	1.654

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Chemical and allied products																	
	Total: Chemicals and allied products			Industrial inorganic chemicals			Industrial organic chemicals			Plastics, except synthetic rubber			Synthetic rubber			Synthetic fibers		
	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	
1947: Average.....	\$51.13	41.5	\$1.222	\$55.56	40.3	\$1.281	\$52.79	40.3	\$1.310	\$53.96	41.6	\$1.267	\$55.81	39.7	\$1.431	\$49.02	39.5	\$1.241
1948: Average.....	56.23	41.5	1.355	62.13	40.9	1.519	57.69	40.4	1.428	58.75	41.4	1.419	62.88	39.9	1.576	53.05	39.5	1.343
1949: January.....	57.70	41.1	1.404	64.20	41.1	1.592	56.36	39.6	1.499	61.59	41.5	1.484	64.40	40.0	1.610	55.55	39.2	1.417
February.....	57.81	41.0	1.410	63.37	40.7	1.557	56.37	39.9	1.513	60.38	40.8	1.480	64.24	39.9	1.610	55.26	39.0	1.417
March.....	57.51	40.9	1.406	62.55	40.3	1.552	56.69	39.4	1.515	58.98	40.0	1.474	63.11	39.2	1.661	55.03	38.7	1.422
April.....	57.45	40.6	1.418	62.98	40.5	1.555	56.17	38.8	1.525	58.05	39.3	1.477	64.87	38.8	1.672	53.63	37.5	1.430
May.....	58.20	40.7	1.430	62.59	40.2	1.557	60.09	39.2	1.533	58.21	39.2	1.485	67.03	39.8	1.684	55.32	38.8	1.437
June.....	59.08	40.8	1.448	65.41	41.4	1.580	60.56	39.2	1.545	59.65	39.6	1.507	67.07	39.9	1.681	54.63	38.2	1.430
July.....	59.44	40.6	1.466	64.00	40.3	1.588	61.50	39.3	1.565	59.75	39.8	1.502	68.21	39.0	1.749	55.13	38.1	1.447
August.....	58.77	40.5	1.451	63.20	40.1	1.576	60.68	39.2	1.548	59.56	40.0	1.489	67.62	39.8	1.699	54.02	37.7	1.433
September.....	59.66	41.4	1.441	64.96	40.7	1.596	62.33	39.8	1.566	62.45	41.3	1.512	67.97	39.7	1.712	55.96	38.7	1.446
October.....	59.51	41.7	1.427	64.55	40.8	1.582	62.20	39.9	1.559	62.13	41.2	1.508	68.99	40.7	1.695	55.63	38.9	1.430
November.....	59.43	41.5	1.432	64.08	40.6	1.593	62.44	40.0	1.561	61.80	40.9	1.511	67.78	40.2	1.686	56.20	39.3	1.430
December.....	59.78	41.6	1.437	64.99	40.8	1.593	62.87	40.3	1.560	61.55	40.9	1.505	68.27	40.3	1.694	55.37	39.5	1.427
1950: January.....	59.97	41.3	1.452	64.88	40.5	1.602	63.51	40.3	1.576	63.80	42.0	1.519	68.48	39.7	1.725	56.49	39.2	1.441
Manufacturing—Continued																		
Chemicals and allied products—Continued																		
Drugs and medicines			Paints, pigments, and fillers			Fertilizers			Vegetable and animal oils and fats			Other chemical and allied products			Soap and glycerin			
1947: Average.....	\$48.23	40.7	\$1.185	\$53.34	42.3	\$1.261	\$40.07	42.4	\$0.945	\$46.19	46.8	\$0.987	\$52.54	41.6	\$1.263	\$50.32	42.8	\$1.356
1948: Average.....	53.71	40.6	1.323	58.40	42.2	1.384	42.33	41.5	1.020	50.30	47.4	1.063	57.90	41.3	1.402	55.90	42.0	1.369
1949: January.....	58.48	40.7	1.387	58.45	40.9	1.429	58.20	40.8	1.049	50.91	48.3	1.054	59.58	40.8	1.471	55.24	40.6	1.367
February.....	58.45	40.6	1.395	58.97	40.7	1.440	53.12	41.5	1.030	49.93	46.4	1.076	59.90	40.7	1.462	55.61	40.6	1.316
March.....	56.37	40.7	1.388	58.81	40.5	1.455	44.12	42.3	1.045	50.96	47.1	1.082	59.23	40.4	1.466	64.92	40.5	1.303
April.....	55.78	40.1	1.391	59.92	41.1	1.458	45.13	42.3	1.067	50.18	45.7	1.096	59.12	40.3	1.467	63.96	40.0	1.300
May.....	56.68	40.1	1.403	59.22	40.7	1.454	46.67	42.7	1.062	51.50	45.8	1.105	59.89	40.5	1.475	65.37	40.8	1.314
June.....	56.28	40.2	1.400	59.50	41.2	1.464	46.58	42.5	1.056	52.57	44.2	1.163	59.44	40.4	1.464	64.56	40.9	1.322
July.....	56.00	40.0	1.410	59.31	40.9	1.480	46.50	42.5	1.068	52.69	44.4	1.184	61.32	40.8	1.503	67.55	40.8	1.356
August.....	56.32	40.0	1.408	59.51	41.1	1.448	45.21	41.1	1.100	52.30	44.7	1.170	61.02	40.9	1.492	66.79	41.1	1.325
September.....	56.96	40.6	1.404	61.80	41.0	1.467	44.90	40.9	1.100	51.02	48.0	1.063	62.12	41.3	1.504	68.30	41.7	1.358
October.....	57.16	40.6	1.408	60.90	41.4	1.471	43.66	40.8	1.070	51.06	49.5	1.032	62.57	41.6	1.504	68.97	41.9	1.346
November.....	57.51	40.7	1.413	60.43	41.0	1.474	43.20	40.3	1.072	51.24	49.7	1.031	61.58	41.0	1.502	67.20	41.0	1.339
December.....	57.21	40.6	1.409	60.80	41.0	1.483	44.76	41.1	1.088	50.86	49.0	1.038	62.14	41.1	1.512	67.77	40.8	1.363
1950: January.....	57.57	40.8	1.411	61.02	40.9	1.492	44.12	40.7	1.084	49.88	47.1	1.059	62.71	41.2	1.522	67.85	40.8	1.363
Manufacturing—Continued																		
Products of petroleum and coal																		
Total: Products of petroleum and coal			Petroleum refining			Coke and byproducts			Other petroleum and coal products			Total: Rubber products			Tires and inner tubes			
1947: Average.....	\$60.89	40.7	\$1.496	\$62.95	40.2	\$1.566	\$52.17	39.4	\$1.324	\$55.03	44.2	\$1.245	\$55.32	39.8	\$1.300	\$61.75	38.5	\$1.604
1948: Average.....	69.23	40.7	1.701	72.06	40.3	1.782	58.56	39.7	1.474	60.59	44.1	1.374	56.78	39.0	1.456	62.16	37.2	1.671
1949: January.....	73.29	41.3	1.779	77.02	41.5	1.836	62.24	40.1	1.552	55.26	39.9	1.385	56.89	37.9	1.501	60.72	35.3	1.720
February.....	70.82	39.9	1.775	76.89	39.9	1.833	61.77	39.9	1.548	56.10	39.9	1.408	56.55	37.7	1.500	60.99	35.4	1.720
March.....	70.92	40.0	1.768	74.00	40.0	1.830	61.18	39.6	1.545	57.43	40.7	1.411	55.43	37.0	1.498	61.50	35.8	1.718
April.....	71.26	40.1	1.777	73.95	39.8	1.838	61.54	39.7	1.550	60.08	42.4	1.417	55.50	36.9	1.504	60.92	35.4	1.721
May.....	72.12	40.7	1.775	75.21	40.5	1.837	60.83	39.6	1.530	60.09	42.8	1.404	57.08	37.7	1.514	63.20	36.3	1.741
June.....	71.84	40.2	1.787	74.73	39.9	1.873	61.00	39.2	1.556	60.54	43.0	1.409	58.29	38.2	1.526	64.09	36.6	1.781
July.....	73.59	40.7	1.808	76.60	40.4	1.896	61.47	39.2	1.569	62.03	43.9	1.413	58.37	38.4	1.520	64.45	36.6	1.761
August.....	72.38	40.3	1.796	75.10	39.8	1.887	60.79	39.4	1.543	63.26	44.3	1.428	57.72	38.3	1.507	62.32	36.0	1.731
September.....	74.47	41.1	1.812	77.11	40.5	1.904	61.43	39.1	1.571	67.43	46.6	1.447	61.01	40.3	1.514	69.95	39.1	1.780
October.....	74.09	41.0	1.807	76.13	40.3	1.889	61.60	39.5	1.557	67.39	45.7	1.474	59.57	39.4	1.512	64.83	37.3	1.738
November.....	72.12	40.0	1.803	75.44	40.0	1.886	57.09	36.2	1.577	62.36	42.8	1.457	57.91	38.4	1.508	63.91	36.9	1.732
December.....	71.70	39.9	1.797	74.76	39.7	1.883	61.11	39.4	1.551	59.18	41.3	1.433	59.19	39.2	1.510	64.80	37.2	1.742
1950: January.....	73.97	40.8	1.813	77.56	40.8	1.901	61.34	39.6	1.549	59.90	41.8	1.433	60.56	39.4	1.537	67.60	38.3	1.765

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Rubber products—Continued						Leather and leather products											
	Rubber footwear			Other rubber products			Total: Leather and leather products			Leather			Footwear (except rubber)			Other leather products		
	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours			
1947: Average.....	\$48.31	41.5	\$1.164	\$49.33	40.8	\$1.214	\$49.61	38.6	\$1.082	\$50.78	40.8	\$1.244	\$59.14	38.3	\$1.202	\$28.64	38.3	\$1.009
1948: Average.....	51.75	41.8	1.238	52.47	40.3	41.68	52.2	1.120	52.05	39.6	51.345	53.28	36.6	1.085	50.49	37.7	1.074	
1949: January.....	51.56	40.2	1.200	54.38	40.1	1.356	42.30	37.2	1.127	54.20	36.6	1.371	40.63	36.9	1.101	29.89	36.7	1.087
February.....	49.15	37.8	1.284	54.05	40.1	1.346	42.83	37.7	1.126	54.47	36.8	1.379	41.07	37.3	1.101	41.23	38.0	1.085
March.....	42.07	33.6	1.282	52.49	39.2	1.349	42.56	37.6	1.135	53.41	38.7	1.380	40.96	37.2	1.101	40.78	37.5	1.087
April.....	46.65	37.2	1.284	51.69	38.4	1.346	40.74	35.8	1.128	52.29	38.0	1.376	38.63	35.1	1.102	39.93	36.5	1.094
May.....	48.39	38.6	1.287	52.51	39.1	1.343	40.06	35.1	1.141	53.03	38.4	1.381	37.37	34.0	1.093	40.11	36.4	1.102
June.....	50.35	39.4	1.278	53.85	39.8	1.353	41.46	36.5	1.136	54.39	39.1	1.391	39.34	36.0	1.090	40.55	36.6	1.108
July.....	48.84	38.7	1.262	54.11	40.2	1.346	41.74	37.0	1.128	53.19	38.1	1.396	39.93	35.8	1.085	40.70	37.1	1.087
August.....	48.78	38.9	1.254	55.46	40.6	1.396	42.00	37.2	1.129	54.34	38.9	1.397	40.04	36.7	1.091	40.83	37.6	1.086
September.....	51.71	40.4	1.280	56.50	41.3	1.368	41.99	36.8	1.141	54.76	36.0	1.404	39.74	36.0	1.104	41.46	38.0	1.091
October.....	49.81	39.1	1.274	57.05	41.5	1.375	41.72	36.5	1.143	55.09	36.1	1.409	38.61	35.1	1.100	42.72	38.8	1.101
November.....	50.51	39.9	1.266	54.04	39.5	1.368	40.08	35.1	1.142	54.50	38.9	1.401	36.40	33.3	1.093	41.65	37.8	1.102
December.....	50.31	39.8	1.264	56.10	41.1	1.365	42.07	37.1	1.134	55.58	39.5	1.407	39.20	36.2	1.083	42.33	38.2	1.108
1950: January.....	45.87	35.7	1.285	57.04	41.3	1.381	42.86	37.7	1.137	55.30	39.0	1.418	40.69	37.3	1.091	42.17	38.2	1.104
Manufacturing—Continued																		
Stone, clay, and glass products																		
Total: Stone, clay, and glass products			Glass and glass products			Glass containers			Pressed and blown glass			Cement, hydraulic			Structural clay products			
1947: Average.....	\$49.07	41.1	\$1.194	\$50.13	39.6	\$1.206	\$49.78	40.6	\$1.226	\$45.39	39.5	\$1.149	\$49.56	42.0	\$1.180	\$45.07	40.6	\$1.110
1948: Average.....	53.46	40.9	1.307	54.06	39.2	1.379	52.05	39.7	47.61	38.8	1.227	54.76	41.9	1.307	49.57	40.4	1.227	
1949: January.....	54.50	40.1	1.359	57.30	39.3	1.468	53.07	38.4	1.382	50.85	39.2	1.204	55.55	41.4	1.342	49.54	39.1	1.267
February.....	55.02	40.4	1.362	58.53	39.9	1.467	53.92	39.1	1.379	50.73	38.9	1.304	55.29	41.6	1.329	50.25	39.6	1.269
March.....	54.18	39.9	1.358	56.97	39.1	1.457	53.35	39.2	1.361	50.95	38.9	1.310	55.67	41.7	1.335	49.79	39.3	1.267
April.....	53.37	37.3	1.358	55.39	38.2	1.450	52.90	38.7	1.367	49.10	38.0	1.262	56.32	41.5	1.357	49.81	39.1	1.274
May.....	53.90	39.6	1.361	56.81	39.1	1.453	54.53	39.8	1.370	50.25	38.3	1.312	57.68	41.8	1.380	49.94	39.2	1.274
June.....	53.85	39.4	1.360	55.98	38.9	1.439	54.30	39.9	1.361	51.28	37.9	1.295	58.80	42.0	1.400	49.43	38.8	1.274
July.....	52.94	38.7	1.368	55.22	37.9	1.457	54.12	39.3	1.377	47.80	36.6	1.306	58.07	41.1	1.413	48.86	38.5	1.266
August.....	54.17	39.6	1.368	56.08	39.0	1.453	53.58	39.6	1.359	49.15	38.1	1.290	58.36	41.6	1.401	49.51	38.8	1.278
September.....	54.73	39.6	1.382	55.89	38.2	1.465	51.59	37.3	1.381	50.53	38.9	1.299	59.16	41.6	1.422	50.04	39.0	1.283
October.....	55.51	40.4	1.374	57.04	39.5	1.444	54.81	40.3	1.360	50.62	39.0	1.298	59.40	42.1	1.411	49.83	38.9	1.281
November.....	55.28	40.0	1.382	57.19	39.2	1.459	54.62	39.9	1.369	51.28	38.1	1.325	57.66	41.1	1.403	49.59	38.5	1.288
December.....	55.65	40.3	1.381	58.16	39.7	1.465	54.37	39.6	1.373	51.63	39.5	1.307	57.81	41.5	1.393	50.01	39.1	1.279
1950: January.....	55.52	40.0	1.388	58.92	39.6	1.488	53.36	39.6	1.398	51.35	38.9	1.320	57.63	40.9	1.400	49.23	38.7	1.272
Manufacturing—Continued																		
Stone, clay, and glass products—Continued																		
Brick and hollow tile			Pottery and related products			Concrete, gypsum, and plaster products			Concrete products			Other stone, clay, and glass products			Primary metal industries			
1947: Average.....	\$44.58	42.7	\$1.044	\$45.74	38.7	\$1.182	\$51.30	45.0	\$1.140	\$53.61	45.2	\$1.186	\$50.88	41.6	\$1.223	\$55.24	38.8	\$1.188
1948: Average.....	49.05	42.5	1.154	49.46	38.7	1.278	50.49	44.8	1.261	50.92	44.4	1.282	55.10	41.0	1.344	61.03	40.1	1.522
1949: January.....	48.37	41.2	1.174	50.79	37.9	1.340	56.25	43.4	1.296	56.68	43.1	1.316	55.96	40.2	1.392	63.72	40.0	1.563
February.....	48.40	41.3	1.172	50.98	37.1	1.338	56.51	43.3	1.303	56.89	43.1	1.320	56.78	40.1	1.391	63.16	39.8	1.567
March.....	48.09	41.1	1.170	50.46	37.6	1.342	55.47	42.8	1.296	56.10	42.4	1.323	54.91	39.5	1.390	61.70	39.0	1.562
April.....	49.18	41.5	1.180	49.10	36.7	1.338	55.17	42.5	1.295	55.30	43.8	1.331	55.97	38.8	1.391	60.83	38.4	1.564
May.....	49.66	41.1	1.191	45.56	36.1	1.338	55.29	42.8	1.294	55.29	43.9	1.325	54.05	38.8	1.393	60.08	38.0	1.561
June.....	49.50	41.5	1.189	42.55	31.1	1.284	57.77	43.6	1.304	59.60	44.4	1.346	52.76	37.9	1.392	58.63	38.6	1.569
July.....	50.40	42.6	1.182	46.84	31.9	1.342	59.50	44.6	1.314	61.39	44.2	1.389	53.69	38.6	1.391	59.45	37.8	1.561
August.....	50.68	42.3	1.194	46.82	31.5	1.342	60.34	44.8	1.346	62.62	44.7	1.401	55.37	39.1	1.416	60.42	37.6	1.607
September.....	51.26	42.8	1.200	50.71	37.7	1.345	60.26	44.9	1.342	61.51	44.8	1.373	55.34	39.5	1.401	58.38	37.5	1.556
October.....	50.53	42.0	1.203	50.97	37.7	1.352	59.85	44.5	1.345	57.98	42.6	1.361	55.01	39.1	1.407	57.48	36.4	1.579
November.....	49.35	41.4	1.192	51.16	37.7	1.257	60.08	44.7	1.344	58.16	42.7	1.362	55.36	39.4	1.405	62.88	39.4	1.596
1950: January.....	47.53	40.9	1.162	49.19	36.3	1.355	55.47	43.6	1.341	55.73	41.1	1.356	57.35	40.7	1.409	63.83	39.5	1.616

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																		
	Primary metal industries—Continued																		
	Blast furnaces, steel works, and rolling mills			Iron and steel foundries			Gray-iron foundries			Malleable-iron foundries			Steel foundries			Primary smelting and refining of non-ferrous metals			
	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	
1947: Average	\$66.12	39.0	\$1.639	\$54.80	41.2	\$1.330	\$55.24	42.3	\$1.306	\$54.36	40.2	\$1.353	\$53.94	39.6	\$1.362	\$52.73	41.0	\$1.286	
1948: Average	62.41	39.5	1.580	58.45	40.7	1.436	57.66	40.9	1.405	59.19	40.4	1.458	59.93	40.6	1.476	58.22	41.0	1.420	
1949: January	66.24	40.0	1.656	58.74	39.5	1.487	57.55	39.6	1.454	58.94	38.7	1.523	60.39	39.6	1.525	61.01	41.0	1.510	
February	65.64	39.9	1.645	58.61	39.4	1.485	57.38	39.6	1.449	56.77	37.3	1.522	59.40	40.0	1.528	61.16	40.8	1.499	
March	64.90	39.8	1.643	55.50	37.6	1.476	55.82	37.7	1.439	53.80	35.1	1.507	59.40	39.0	1.523	61.09	41.0	1.480	
April	64.79	39.4	1.642	55.44	37.4	1.476	55.09	37.9	1.441	54.42	35.2	1.522	57.8	1.514	1.524	60.44	40.7	1.500	
June	63.24	38.8	1.644	52.26	35.5	1.477	50.47	38.1	1.438	51.60	34.4	1.500	55.72	36.8	1.514	61.08	40.7	1.499	
July	59.88	36.4	1.645	53.47	36.2	1.477	52.67	36.4	1.447	53.70	35.4	1.517	54.73	35.2	1.512	60.71	40.5	1.499	
August	61.33	37.6	1.631	53.50	36.2	1.478	53.00	36.6	1.448	53.50	35.2	1.520	54.50	35.9	1.518	53.39	39.4	1.482	
September	62.07	37.1	1.673	54.39	36.5	1.496	55.04	37.8	1.456	54.01	35.0	1.543	53.41	35.0	1.526	59.24	39.6	1.496	
October	55.90	34.0	1.644	54.80	36.9	1.485	55.96	38.3	1.461	52.32	34.4	1.521	53.99	35.4	1.525	58.87	40.7	1.471	
November	56.48	34.4	1.642	53.83	36.3	1.483	54.31	37.3	1.456	51.14	33.6	1.522	54.66	35.7	1.531	58.43	39.4	1.483	
December	64.65	39.3	1.645	57.22	38.3	1.494	57.29	39.0	1.469	57.41	37.4	1.535	56.61	37.0	1.530	59.64	40.3	1.480	
1950: January	65.87	39.3	1.676	58.39	38.8	1.505	57.86	39.2	1.476	59.29	38.3	1.548	58.71	38.0	1.545	62.35	41.4	1.506	
Manufacturing—Continued																			
Primary metal industries—Continued																			
	Primary smelting and refining of copper, lead, and zinc			Primary refining of aluminum			Rolling, drawing, and alloying of nonferrous metals			Rolling, drawing, and alloying of copper			Rolling, drawing, and alloying of aluminum			Nonferrous foundries			
1947: Average	\$51.41	40.9	\$1.257	\$83.46	40.9	\$1.307	\$81.89	39.7	\$1.207	\$84.14	40.1	\$1.250	\$88.58	38.8	\$1.280	\$84.92	40.0	\$1.373	
1948: Average	57.14	40.9	1.307	58.65	41.4	1.424	57.81	40.2	1.428	60.42	40.1	1.481	53.88	39.1	1.378	58.96	40.0	1.499	
1949: January	61.55	40.9	1.505	61.59	41.5	1.484	59.77	39.9	1.498	61.37	39.8	1.542	58.02	40.1	1.447	61.46	39.5	1.556	
February	60.75	40.8	1.489	60.68	41.0	1.487	57.99	39.0	1.487	58.45	38.3	1.526	57.70	39.9	1.446	61.46	39.8	1.556	
March	60.53	40.9	1.480	60.66	41.1	1.476	55.09	37.3	1.477	54.09	35.8	1.511	55.81	39.0	1.431	59.48	38.6	1.541	
April	61.18	41.2	1.485	62.81	41.9	1.485	52.99	36.1	1.468	50.38	33.5	1.504	55.65	39.0	1.427	58.79	38.0	1.547	
May	60.22	40.5	1.487	61.07	41.1	1.486	53.62	36.5	1.469	51.92	34.5	1.503	55.30	38.7	1.429	59.01	37.9	1.557	
June	59.85	40.2	1.485	60.91	41.1	1.482	55.17	37.3	1.479	55.18	36.4	1.516	54.89	38.2	1.437	59.94	38.5	1.557	
July	57.77	38.8	1.489	61.10	41.2	1.483	56.37	37.9	1.487	57.26	37.8	1.519	55.02	38.0	1.448	60.57	38.8	1.561	
August	54.76	39.2	1.448	61.92	40.9	1.514	58.98	39.0	1.510	59.26	36.9	1.547	55.48	38.0	1.460	60.14	38.6	1.558	
September	57.51	39.2	1.467	62.23	41.1	1.514	59.65	39.5	1.510	61.96	40.0	1.549	55.83	38.4	1.454	61.50	39.3	1.565	
October	57.47	40.3	1.426	64.45	42.4	1.520	61.84	40.5	1.527	64.69	41.1	1.574	57.41	39.4	1.457	62.33	39.5	1.578	
November	56.12	39.0	1.439	64.83	40.8	1.589	63.57	41.2	1.543	65.44	41.6	1.573	58.55	39.8	1.471	61.93	29.1	1.584	
December	57.89	40.1	1.443	61.87	40.6	1.524	62.28	40.6	1.534	66.32	42.0	1.579	54.67	37.7	1.450	63.24	39.9	1.585	
1950: January	61.73	41.6	1.484	61.16	40.8	1.499	62.16	40.6	1.531	64.49	41.1	1.569	57.29	39.4	1.454	62.77	39.7	1.581	
Manufacturing—Continued																			
	Primary metal industries—Continued									Fabricated metal products (except ordnance, machinery, and transportation equipment)									
	Other primary metal industries			Iron and steel forgings			Wire drawing			Total: Fabricated metal products (except ordnance, machinery and transportation equipment)			Tin cans and other tinware			Cutlery, hand tools, and hardware			
1947: Average	\$56.94	40.5	\$1.406	\$59.79	40.7	\$1.469	\$56.47	40.6	\$1.391	\$52.05	40.8	\$1.276	\$48.95	41.0	\$1.194	\$50.02	41.2	\$1.214	
1948: Average	63.08	40.8	1.548	65.18	40.8	1.597	62.17	40.5	1.535	56.68	40.6	1.396	54.07	40.9	1.322	54.22	40.8	1.320	
1949: January	66.95	41.2	1.625	69.30	41.3	1.678	67.24	41.1	1.636	58.23	40.1	1.452	54.46	39.9	1.365	56.56	40.6	1.393	
February	66.54	40.9	1.627	68.67	40.9	1.679	66.54	40.7	1.635	57.72	39.7	1.454	54.62	39.9	1.369	55.50	39.9	1.391	
March	63.96	39.7	1.611	65.17	39.4	1.654	63.58	39.2	1.622	57.35	39.5	1.452	55.04	40.0	1.376	55.44	39.8	1.393	
April	61.51	38.3	1.606	62.24	38.0	1.638	58.99	36.8	1.603	56.19	38.7	1.452	53.68	39.1	1.373	53.87	38.7	1.392	
May	61.74	38.3	1.612	61.96	37.6	1.648	60.34	37.5	1.609	66.67	39.0	1.453	54.06	39.4	1.372	54.51	39.1	1.394	
June	62.56	38.5	1.625	62.93	38.0	1.656	61.44	37.8	1.637	57.39	39.2	1.464	55.68	40.7	1.368	53.92	38.6	1.397	
July	61.88	38.2	1.620	62.28	37.5	1.634	61.28	38.0	1.612	57.67	39.3	1.468	50.34	42.6	1.358	54.33	38.7	1.394	
August	61.65	38.1	1.618	61.37	36.9	1.636	61.27	38.0	1.612	54.13	39.6	1.469	61.13	42.6	1.435	53.37	38.2	1.397	
September	62.52	38.4	1.622	61.13	36.4	1.632	63.34	38.0	1.624	59.24	39.2	1.474	50.42	42.6	1.432	53.18	38.3	1.394	
October	62.93	38.6	1.622	61.06	36.4	1.650	66.67	41.0	1.626	58.51	40.1	1.459	55.58	39.5	1.407	53.40	38.5	1.387	
November	60.97	37.8	1.613	59.42	36.1	1.646	64.55	39.6	1.630	56.88	39.2	1.451	53.19	38.1	1.396	44.41	39.2	1.388	
December	65.89	40.5	1.627	64.01	38.4	1.667	69.34	42.0	1.651	59.62	40.5	1.472	57.16	40.8	1.401	56.80	40.4	1.406	
1950: January	65.48	39.9	1.641	64.67	38.4	1.684	68.67	40.9	1.679	59.93	40.3	1.487	56.66	40.3	1.406	57.37	40.4	1.420	

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																		
	Fabricated metal products (except ordnance, machinery, and transportation equipment)—Continued																		
	Cutlery and edge tools			Hand tools			Hardware *			Heating apparatus (except electric) and plumbers' supplies			Sanitary ware and plumbers' supplies			Oil burners, nonelectric heating and cooking apparatus, not elsewhere classified			
	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hry. earnings	
1947: Average.....	\$48.14	41.9	\$1.149	\$51.66	41.2	\$1.254	\$49.86	40.9	\$1.210	\$52.85	40.5	\$1.305	\$55.38	40.6	\$1.364	\$51.72	40.5	\$1.277	
1948: Average.....	51.13	41.3	1.238	56.07	40.9	1.371	54.26	40.4	1.343	57.53	40.2	1.431	60.40	40.4	1.493	55.80	40.0	1.395	
1949: January.....	52.07	40.9	1.273	58.06	40.7	1.427	57.45	40.4	1.422	55.97	38.1	1.469	58.33	37.8	1.543	54.57	38.4	1.421	
February.....	50.72	40.0	1.268	57.31	40.3	1.422	56.37	39.7	1.420	54.94	37.2	1.477	58.47	37.6	1.555	52.76	37.0	1.426	
March.....	50.20	39.5	1.271	56.72	39.8	1.425	56.66	39.9	1.420	55.57	37.6	1.478	59.09	37.9	1.559	53.51	37.5	1.427	
April.....	47.92	38.0	1.261	54.90	38.8	1.415	55.29	38.8	1.425	53.99	36.6	1.475	56.58	36.5	1.550	52.37	36.7	1.427	
May.....	49.99	39.8	1.256	53.95	38.4	1.405	56.43	39.3	1.436	54.61	37.1	1.472	57.55	37.2	1.547	52.76	37.0	1.426	
June.....	49.88	39.4	1.266	52.23	37.2	1.404	56.04	39.0	1.437	54.72	37.3	1.467	57.44	36.3	1.541	54.26	38.0	1.428	
July.....	49.68	39.3	1.264	52.25	37.4	1.397	56.67	39.0	1.453	54.85	37.7	1.455	58.64	38.3	1.531	53.05	37.6	1.411	
August.....	49.87	39.3	1.269	51.78	36.8	1.407	55.22	38.4	1.438	57.63	37.5	1.459	59.25	38.5	1.539	56.82	40.1	1.417	
September.....	52.26	40.8	1.281	52.82	37.3	1.416	56.88	39.5	1.440	56.56	40.3	1.478	60.14	38.6	1.558	59.45	41.2	1.443	
October.....	52.51	40.1	1.287	54.03	38.4	1.407	53.35	37.6	1.419	61.23	41.4	1.479	63.73	40.8	1.562	60.01	41.7	1.450	
November.....	53.12	41.1	1.280	53.44	37.9	1.410	54.89	38.6	1.422	59.32	40.0	1.483	64.56	41.2	1.567	65.24	39.3	1.451	
December.....	50.93	40.1	1.270	54.93	38.9	1.412	59.20	40.8	1.451	60.35	40.5	1.490	65.20	41.5	1.571	57.27	39.8	1.439	
1950: January.....	50.87	39.9	1.275	55.69	39.1	1.424	60.00	40.9	1.467	59.42	39.8	1.493	62.32	40.0	1.558	57.41	39.7	1.446	
Manufacturing—Continued																			
Fabricated metal products (except ordnance machinery, and transportation equipment)—Continued																			
Fabricated structural metal products			Structural steel and ornamental metal-work			Boiler-shop products			Sheet-metal work			Metal stamping, coating, and engraving			Stamped and pressed metal products				
1947: Average.....	\$53.57	41.3	\$1.297	\$53.28	41.4	\$1.287	\$54.38	41.1	\$1.323	\$51.74	41.0	\$1.262	\$52.25	40.5	\$1.290	\$53.71	40.6	\$1.323	
1948: Average.....	58.17	41.2	1.412	57.68	41.2	1.400	58.79	41.2	1.427	56.64	40.6	1.395	56.66	40.1	1.413	58.39	40.3	1.449	
1949: January.....	60.81	41.2	1.476	61.02	41.4	1.474	60.68	41.0	1.480	59.24	40.8	1.452	59.00	40.0	1.475	60.85	40.3	1.510	
February.....	60.85	41.2	1.477	61.19	41.6	1.471	60.80	41.0	1.483	58.27	40.1	1.453	65.81	39.6	1.470	60.24	40.0	1.506	
March.....	60.26	40.8	1.477	60.79	41.1	1.471	60.24	40.9	1.480	57.42	39.9	1.439	57.20	39.1	1.463	59.02	39.4	1.498	
April.....	58.88	40.0	1.472	59.09	40.2	1.470	59.79	40.4	1.480	55.22	37.9	1.457	57.07	38.9	1.467	58.76	39.2	1.499	
May.....	59.90	40.5	1.479	60.75	40.8	1.489	59.68	40.3	1.481	57.93	39.9	1.452	57.11	38.8	1.472	58.69	39.1	1.501	
June.....	59.95	40.4	1.484	61.13	41.0	1.491	59.00	39.6	1.490	57.63	39.8	1.448	59.35	39.7	1.495	61.16	40.0	1.529	
July.....	59.32	40.0	1.483	60.13	40.3	1.492	59.75	40.1	1.490	58.28	39.9	1.460	58.08	38.8	1.497	59.59	38.9	1.532	
August.....	59.83	40.4	1.481	62.32	41.8	1.491	59.10	39.8	1.485	57.70	39.4	1.457	60.06	39.8	1.509	61.88	40.0	1.547	
September.....	60.59	40.8	1.485	62.31	41.9	1.487	60.71	40.5	1.499	58.32	40.0	1.458	60.78	40.2	1.512	63.02	40.5	1.556	
October.....	59.45	40.1	1.468	60.97	41.7	1.462	59.82	40.2	1.488	55.41	38.8	1.428	58.97	39.9	1.478	60.61	38.9	1.519	
November.....	57.89	39.3	1.473	57.95	39.8	1.467	58.97	39.5	1.493	57.98	40.1	1.446	56.38	38.8	1.453	57.82	38.7	1.494	
December.....	60.62	40.6	1.493	63.34	42.2	1.501	59.18	39.4	1.502	58.28	40.0	1.457	60.03	40.1	1.497	62.02	40.3	1.539	
1950: January.....	59.88	40.0	1.497	61.24	41.1	1.490	58.62	38.9	1.507	58.74	39.8	1.476	61.00	40.3	1.516	63.25	40.7	1.554	
Manufacturing—Continued																			
Fabricated metal products (except ordnance, machinery, and transportation equipment)—Con.			Machinery (except electrical)																
Other fabricated metal products			Total: Machinery (except electrical)			Engines and turbines			Agricultural machinery and tractors			Tractors			Agricultural machinery (except tractors)				
1947: Average.....	\$52.25	40.6	\$1.287	\$55.89	41.4	\$1.350	\$58.40	40.7	\$1.435	\$55.76	40.7	\$1.370	\$57.69	40.8	\$1.414	\$53.43	40.6	\$1.316	
1948: Average.....	56.88	40.4	1.408	60.52	41.2	1.469	63.50	40.5	1.568	60.59	40.5	1.496	62.05	40.5	1.532	58.62	40.4	1.451	
1949: January.....	59.08	40.3	1.466	61.72	40.5	1.534	64.16	39.7	1.616	62.11	40.1	1.549	64.15	40.6	1.580	69.72	39.6	1.508	
February.....	58.84	41.1	1.471	61.57	40.4	1.534	64.96	39.9	1.628	62.07	40.2	1.544	64.11	40.2	1.570	60.82	40.2	1.513	
March.....	57.65	40.3	1.467	60.85	40.9	1.528	63.50	39.1	1.624	61.38	38.7	1.545	62.25	39.6	1.572	60.30	38.8	1.515	
April.....	56.60	38.5	1.470	59.55	39.1	1.523	62.33	38.6	1.616	60.79	39.0	1.543	63.52	38.6	1.568	59.61	39.4	1.513	
May.....	56.44	38.5	1.466	59.70	39.2	1.523	62.90	39.0	1.620	60.26	38.0	1.545	60.80	38.8	1.567	59.51	39.2	1.518	
June.....	58.15	39.0	1.491	59.94	39.2	1.520	63.58	39.2	1.622	61.78	38.5	1.564	62.57	39.6	1.580	60.83	39.4	1.544	
July.....	59.03	39.5	1.495	59.67	39.0	1.530	61.72	38.1	1.620	62.09	39.7	1.564	63.68	40.1	1.588	60.13	39.2	1.534	
August.....	57.92	39.0	1.485	59.86	39.1	1.531	62.93	38.8	1.622	61.00	38.1	1.564	62.25	39.4	1.584	59.48	38.9	1.529	
September.....	59.15	39.7	1.490	60.44	39.3	1.538	62.50	38.5	1.625	61.30	39.1	1.570	61.69	38.8	1.590	61.03	39.5	1.545	
October.....	59.85	40.3	1.485	60.21	39.2	1.536	62.15	38.2	1.627	61.23	39.4	1.554	61.39	39.0	1.574	60.70	39.7	1.529	
November.....	57.51	39.2	1.467	59.21	38.5	1.538	61.81	37.9	1.631	57.61	37.0	1.557	58.02	36.7	1.581	57.00	37.4	1.524	
December.....	60.56	40.7	1.488	61.26	39.7	1.543	63.84	39.0	1.637	61.00	38.9	1.568	61.22	38.6	1.586	60.56	39.3	1.541	
1950: January.....	61.86	40.7	1.520	61.22	39.6	1.546	64.12	39.1	1.640	59.93	38.0	1.577	58.92	38.8	1.601	60.68	39.3	1.544	

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Machinery (except electrical)—Continued																	
	Construction and mining machinery			Metalworking machinery			Machine tools			Metalworking machinery (except machine tools)			Machine-tool accessories			Special-industry machinery (except metalworking machinery)		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. hrly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1947: Average	\$54.72	41.8	\$1.309	\$58.49	42.2	\$1.286	\$57.75	42.4	\$1.302	\$57.57	41.9	\$1.274	\$60.52	42.0	\$1.441	\$65.29	42.7	\$1.309
1948: Average	66.33	42.1	1.433	62.94	42.1	1.495	61.57	42.1	1.450	62.98	42.1	1.496	65.21	41.8	1.560	60.62	42.3	1.433
1949: January	61.10	41.2	1.483	63.73	41.3	1.543	61.59	41.2	1.495	64.91	41.5	1.564	66.32	41.4	1.602	61.56	41.4	1.487
February	60.70	41.1	1.477	63.26	41.0	1.543	61.27	40.9	1.498	64.39	41.3	1.559	65.77	40.9	1.608	60.93	41.0	1.486
March	60.01	40.6	1.478	62.93	40.6	1.550	60.68	40.4	1.502	64.12	41.0	1.564	65.89	40.7	1.619	60.53	40.8	1.491
April	59.70	40.2	1.485	61.26	39.7	1.543	59.67	39.7	1.503	62.04	39.9	1.555	63.20	39.4	1.604	60.47	40.5	1.493
May	58.67	39.8	1.474	60.72	39.4	1.541	59.04	39.2	1.506	61.61	39.9	1.544	62.80	39.2	1.602	60.57	40.3	1.493
June	58.61	39.9	1.469	59.79	38.8	1.541	57.90	38.5	1.504	60.88	39.3	1.544	62.52	39.0	1.603	59.98	39.8	1.507
July	56.97	38.6	1.476	59.10	38.3	1.543	57.00	37.9	1.504	59.64	38.7	1.541	62.38	38.7	1.612	60.02	39.8	1.508
August	57.00	38.8	1.466	58.87	38.6	1.551	58.32	38.6	1.511	60.22	39.0	1.544	62.09	38.0	1.634	59.67	39.7	1.503
September	57.11	38.8	1.472	60.37	38.9	1.552	58.08	38.4	1.512	60.26	39.0	1.545	62.27	39.8	1.640	60.30	39.8	1.515
October	57.07	38.8	1.471	60.41	38.8	1.557	57.64	38.8	1.509	61.50	39.5	1.557	64.85	30.3	1.650	59.88	39.5	1.516
November	55.90	37.9	1.475	59.44	38.4	1.548	57.34	38.1	1.505	59.48	38.2	1.557	63.38	39.1	1.621	59.97	39.4	1.522
December	59.48	40.3	1.476	61.73	39.7	1.555	59.92	39.8	1.517	62.53	39.8	1.571	64.00	39.9	1.604	61.68	40.5	1.523
1950: January	60.43	40.5	1.492	61.00	39.2	1.556	59.16	39.6	1.517	62.02	39.3	1.578	63.60	39.6	1.606	61.45	40.4	1.521
Manufacturing—Continued																		
Machinery (except electrical)—Continued																		
General industrial machinery			Office and store machines and devices			Computing machines and cash registers			Typewriters			Service-industry and household machines			Refrigerators and air-conditioning units			
1947: Average	\$54.76	41.7	\$1.338	\$57.59	41.7	\$1.381	\$62.34	41.7	\$1.495	\$62.50	41.5	\$1.265	\$54.50	40.7	\$1.339	\$53.77	40.1	\$1.341
1948: Average	66.78	41.2	1.451	61.49	41.1	1.496	66.54	41.1	1.615	55.65	41.1	1.354	58.98	40.4	1.460	58.29	39.9	1.461
1949: January	61.18	40.6	1.507	63.11	40.2	1.570	68.07	40.4	1.685	66.27	39.6	1.421	60.58	39.8	1.522	59.97	39.3	1.526
February	61.18	40.6	1.507	62.72	40.0	1.568	67.82	40.3	1.683	65.56	39.1	1.422	60.70	39.8	1.525	60.44	39.5	1.530
March	60.17	39.9	1.508	62.02	39.9	1.577	68.07	40.3	1.689	55.75	38.9	1.434	59.73	39.4	1.516	58.71	38.7	1.517
April	59.26	39.4	1.504	61.78	39.0	1.584	67.43	39.9	1.690	55.83	37.1	1.451	56.96	37.8	1.507	55.45	36.7	1.511
May	58.95	39.3	1.500	62.21	39.3	1.583	66.70	39.4	1.693	56.55	39.3	1.439	59.03	39.3	1.502	58.86	38.8	1.517
June	59.26	39.3	1.500	62.73	39.6	1.584	67.28	39.6	1.699	56.76	39.2	1.448	56.60	39.3	1.518	62.08	38.5	1.533
July	58.16	38.8	1.499	62.45	39.3	1.580	67.86	39.5	1.718	56.23	39.1	1.438	62.58	40.9	1.530	62.78	40.4	1.554
August	58.39	38.9	1.501	60.87	38.6	1.577	67.15	39.5	1.700	54.08	37.9	1.427	62.48	40.6	1.539	62.91	40.2	1.565
September	59.00	39.1	1.509	62.69	39.5	1.587	67.93	39.7	1.711	56.74	39.4	1.440	63.71	41.1	1.550	64.14	40.7	1.576
October	59.72	39.5	1.512	62.53	39.5	1.583	67.89	39.7	1.710	56.85	39.7	1.432	60.99	39.5	1.544	59.32	38.2	1.553
November	58.29	38.5	1.514	62.77	39.5	1.586	67.91	39.6	1.715	66.41	39.2	1.439	60.49	39.2	1.543	58.01	37.5	1.547
December	59.80	39.5	1.514	64.36	40.0	1.600	69.97	40.4	1.732	56.44	38.9	1.451	62.61	40.5	1.546	61.80	40.0	1.545
1950: January	59.99	39.6	1.515	63.88	39.8	1.605	60.60	40.3	1.727	55.77	38.7	1.441	63.13	40.7	1.551	62.40	40.1	1.556
Manufacturing—Continued																		
Machinery (except electrical)—Continued																		
Miscellaneous machinery parts			Machinists' shops (job and repair)			Total: Electrical machinery			Electrical generating, transmission, distribution, and industrial apparatus			Motors, generators, transformers, and industrial controls			Electrical equipment for vehicles			
1947: Average	\$53.09	40.1	\$1.324	\$54.46	40.1	\$1.358	\$51.26	40.3	\$1.272	\$53.92	40.6	\$1.328	\$55.01	40.6	\$1.355	\$51.89	39.7	\$1.307
1948: Average	57.62	40.1	1.437	58.77	40.2	1.462	55.66	40.1	1.388	58.34	40.4	1.444	59.55	40.4	1.474	56.77	39.7	1.430
1949: January	59.65	39.9	1.495	60.29	39.9	1.511	57.01	39.7	1.436	60.15	40.1	1.500	61.90	40.3	1.536	59.19	39.3	1.506
February	58.67	39.3	1.403	59.58	39.3	1.516	57.02	39.6	1.440	60.20	40.0	1.505	61.45	40.0	1.537	58.85	39.1	1.505
March	58.15	39.0	1.491	59.58	39.2	1.520	56.50	39.1	1.445	59.49	39.5	1.506	60.91	39.5	1.542	57.26	38.2	1.499
April	55.98	37.7	1.485	59.24	39.0	1.519	55.59	38.5	1.444	58.66	38.9	1.508	60.06	39.0	1.540	57.40	38.5	1.491
May	55.35	37.3	1.484	57.45	38.1	1.508	55.99	38.8	1.443	58.36	38.6	1.512	60.06	38.9	1.544	59.80	39.5	1.514
June	55.87	37.7	1.482	57.72	39.2	1.498	56.16	39.0	1.440	58.55	38.8	1.509	60.21	39.1	1.540	59.69	39.4	1.515
July	55.20	37.2	1.484	55.36	38.8	1.504	56.00	38.7	1.447	58.24	39.0	1.519	61.23	39.4	1.554	60.97	39.9	1.528
August	57.29	38.5	1.486	58.31	39.0	1.495	56.73	39.1	1.451	58.74	39.3	1.520	61.62	39.6	1.556	62.79	40.8	1.539
September	57.37	38.4	1.494	56.44	37.7	1.497	57.88	40.0	1.447	60.22	39.8	1.513	62.16	40.1	1.556	62.90	40.9	1.538
October	58.08	38.9	1.493	56.81	38.1	1.491	57.97	40.4	1.435	59.89	39.9	1.501	61.51	40.1	1.534	59.95	39.7	1.510
November	58.60	39.0	1.500	55.39	37.1	1.493	57.36	40.0	1.434	59.67	39.7	1.503	61.06	39.7	1.538	58.65	38.1	1.500
December	58.77	39.0	1.507	57.60	38.3	1.504	58.44	40.5	1.443	61.75	40.6	1.531	63.45	40.7	1.559	57.90	38.5	1.504
1950: January	58.96	39.2	1.504	57.90	38.5	1.504	58.56	40.5	1.446	60.89	40.3	1.511	62.14	40.3	1.542	60.26	39.7	1.518

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Electrical machinery—Continued												Transportation equipment					
	Communication equipment			Radio, phonographs, television sets, and equipment			Telephone and telegraph equipment			Electrical appliances, lamps, and miscellaneous products			Total: Transportation equipment			Automobiles		
	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. hours	Avg. wky. hours	Avg. wky. hours	Avg. wky. hours	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings
1947: Average.....	\$48.00	39.9	\$1.203	\$44.41	39.2	\$1.153	\$26.44	41.5	\$1.290	\$51.66	40.6	\$1.273	\$56.87	39.3	\$1.447	\$37.45	39.0	\$1.473
1948: Average.....	51.8	39.8	1.305	45.53	39.2	1.236	55.94	40.7	1.423	56.08	40.2	1.395	51.58	39.0	1.579	61.86	38.4	1.611
1949: January.....	52.78	39.3	1.343	49.65	39.0	1.273	60.50	39.6	1.530	57.70	39.9	1.446	65.23	39.9	1.660	67.74	39.8	1.702
February.....	52.63	39.1	1.346	49.22	38.7	1.272	60.74	39.7	1.530	57.59	39.8	1.447	65.79	39.8	1.653	66.91	39.5	1.694
March.....	53.08	39.0	1.301	49.70	38.8	1.261	61.15	39.3	1.555	56.26	39.0	1.443	63.19	38.6	1.657	62.96	37.7	1.670
April.....	52.38	38.4	1.364	48.64	38.0	1.280	61.19	39.2	1.561	54.42	38.0	1.432	63.58	38.7	1.643	64.77	38.6	1.678
May.....	52.85	38.8	1.362	49.41	38.6	1.280	61.04	39.1	1.561	54.58	38.6	1.414	63.03	38.2	1.650	63.22	37.3	1.693
June.....	53.35	39.2	1.361	50.42	39.3	1.283	61.50	39.4	1.561	54.49	38.7	1.408	65.49	39.5	1.654	66.94	39.4	1.699
July.....	51.54	37.9	1.300	47.78	37.5	1.274	60.68	38.8	1.561	55.13	39.1	1.410	62.77	39.9	1.661	68.67	40.3	1.704
August.....	52.20	38.3	1.365	48.60	38.0	1.279	61.54	39.2	1.570	53.77	39.3	1.419	65.70	39.7	1.660	67.78	39.8	1.703
September.....	54.44	40.0	1.361	52.12	40.5	1.287	61.60	39.1	1.581	56.79	39.8	1.427	67.13	40.1	1.674	69.33	40.4	1.716
October.....	55.66	41.2	1.351	53.46	41.6	1.283	62.33	39.4	1.582	57.67	40.3	1.431	64.75	39.1	1.658	65.87	39.0	1.689
November.....	55.69	41.1	1.355	53.52	41.3	1.294	62.92	39.5	1.581	57.71	40.3	1.432	61.92	37.3	1.660	61.03	36.2	1.686
December.....	55.43	41.0	1.352	53.52	41.3	1.296	62.40	39.1	1.586	58.18	40.4	1.440	65.15	38.8	1.679	65.44	38.2	1.713
1950: January.....	55.37	40.8	1.357	52.96	40.8	1.206	63.24	39.4	1.605	58.97	40.5	1.456	67.91	40.3	1.685	69.75	40.6	1.718
	Manufacturing—Continued																	
	Transportation equipment—Continued																	
	Aircraft and parts			Aircraft			Aircraft engines and parts			Aircraft propellers and parts			Other aircraft parts and equipment			Ship and boat building and repairing		
1947: Average.....	\$54.98	39.9	\$1.378	\$53.90	36.7	\$1.300	\$26.30	39.9	\$1.411	\$59.68	41.5	\$1.458	\$56.50	40.1	\$1.409	\$37.34	39.6	\$1.448
1948: Average.....	61.21	41.0	1.460	60.21	41.1	1.465	63.40	40.9	1.551	62.13	39.7	1.565	63.59	41.0	1.551	60.68	38.7	1.568
1949: January.....	63.18	40.5	1.560	61.55	40.1	1.535	67.13	41.8	1.606	66.34	40.7	1.630	63.73	40.7	1.615	63.30	39.0	1.623
February.....	64.52	41.2	1.566	63.82	41.2	1.540	65.96	41.2	1.601	65.97	40.7	1.621	64.41	41.4	1.603	61.99	38.5	1.610
March.....	63.41	40.7	1.558	63.07	40.9	1.542	64.00	40.3	1.581	65.81	40.8	1.611	64.04	40.3	1.580	62.98	38.9	1.619
April.....	60.99	39.4	1.544	60.97	38.8	1.532	64.04	40.2	1.591	64.36	40.1	1.601	64.50	35.0	1.557	62.50	38.2	1.598
May.....	62.98	40.5	1.555	62.26	40.4	1.541	64.08	40.3	1.590	68.14	41.6	1.635	63.53	40.7	1.581	61.01	38.1	1.617
June.....	62.94	40.5	1.554	61.90	40.3	1.536	65.52	41.0	1.598	67.89	41.5	1.630	63.52	41.2	1.580	62.82	38.8	1.626
July.....	62.08	39.9	1.556	60.78	39.7	1.531	63.80	39.7	1.607	69.88	42.2	1.638	67.77	40.3	1.622	61.94	38.4	1.613
August.....	62.07	39.2	1.549	61.46	39.3	1.525	61.60	39.4	1.565	65.86	40.9	1.624	65.98	40.6	1.625	60.05	37.3	1.610
September.....	63.38	40.6	1.566	62.26	40.4	1.541	65.72	41.0	1.603	68.60	41.4	1.657	66.83	40.8	1.638	61.00	37.7	1.618
October.....	63.67	40.5	1.572	62.42	40.3	1.549	64.64	40.2	1.608	65.73	40.5	1.623	69.17	42.1	1.643	56.11	36.4	1.624
November.....	66.69	41.5	1.607	66.15	41.5	1.594	68.62	42.1	1.630	64.27	39.6	1.623	67.90	41.2	1.648	56.97	34.8	1.637
December.....	66.41	41.2	1.612	66.16	41.3	1.602	67.16	41.0	1.638	67.53	41.3	1.635	67.16	41.2	1.630	62.45	38.1	1.630
1950: January.....	65.28	40.7	1.604	64.63	40.7	1.588	66.18	40.5	1.634	68.88	42.0	1.640	67.65	41.0	1.650	61.54	37.8	1.628
	Manufacturing—Continued																	
	Transportation equipment—Continued																	
	Shipbuilding and repairing			Railroad equipment			Locomotives and parts			Railroad and street cars			Other transportation equipment			Instruments and related products		
1947: Average.....	\$57.59	39.5	\$1.458	\$57.06	40.5	\$1.400	\$28.03	39.8	\$1.480	\$55.86	40.8	\$1.369	\$53.63	40.8	\$1.312	\$49.17	40.3	\$1.220
1948: Average.....	61.22	38.7	1.582	62.24	40.0	1.556	63.80	39.6	1.611	60.82	40.2	1.513	58.14	40.8	1.425	53.45	40.1	1.333
1949: January.....	63.72	38.9	1.638	66.50	40.8	1.630	67.22	39.8	1.689	66.11	41.5	1.663	54.44	38.1	1.429	55.36	40.0	1.384
February.....	62.36	38.4	1.624	65.53	40.7	1.610	64.10	39.3	1.631	66.39	41.6	1.606	54.57	38.0	1.436	55.28	39.8	1.369
March.....	63.61	39.0	1.631	64.76	39.9	1.626	65.35	39.8	1.672	61.38	38.9	1.578	56.83	39.6	1.435	54.83	39.9	1.368
April.....	62.90	38.1	1.651	62.42	38.6	1.617	66.20	39.5	1.678	59.54	37.9	1.571	55.50	39.0	1.422	54.51	39.3	1.367
May.....	61.98	38.0	1.631	63.39	39.2	1.617	66.21	39.6	1.672	61.38	38.9	1.578	56.83	39.6	1.435	54.83	39.9	1.368
June.....	63.18	38.2	1.651	62.71	39.0	1.600	64.48	39.2	1.645	61.34	38.8	1.581	56.78	39.3	1.447	54.01	39.2	1.366
July.....	62.04	38.3	1.623	62.05	37.7	1.600	63.65	39.0	1.632	58.62	38.8	1.578	54.94	38.6	1.398	54.46	37.9	1.364
August.....	61.14	37.7	1.621	62.05	38.4	1.601	62.52	38.8	1.677	66.93	39.2	1.573	54.28	38.4	1.447	54.23	39.0	1.361
September.....	61.24	37.5	1.633	61.84	38.5	1.623	64.44	38.4	1.665	59.57	37.7	1.588	62.85	38.2	1.447	54.06	38.8	1.369
October.....	59.33	36.2	1.639	62.49	38.5	1.623	65.07	39.2	1.660	60.06	37.8	1.589	63.11	41.2	1.469	56.08	39.5	1.409
November.....	57.06	34.5	1.634	63.16	38.3	1.649	66.48	39.2	1.659	59.75	37.3	1.602	59.99	40.1	1.469	56.52	40.0	1.413
December.....	62.72	37.9	1.635	63.39	38.7	1.638	65.56	39.4	1.664	61.18	38.0	1.610	55.43	38.2	1.451	57.02	40.1	1.423
1950: January.....	62.02	37.7	1.645	61.48	38.0	1.618	63.29	38.9	1.627	59.95	37.1	1.616	58.00	40.9	1.418	56.49	39.7	1.423

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Manufacturing—Continued																	
	Instruments and related products—Continued												Miscellaneous manufacturing industries					
	Ophthalmic goods			Photographic apparatus			Watches and clocks			Professional and scientific instruments			Total: Miscellaneous manufacturing industries		Jewelry, silverware, and plated ware			
	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	
1947: Average	\$43.39	46.9	\$1.061	\$54.35	40.5	\$1.342	\$44.53	39.9	\$1.116	\$40.80	40.1	\$1.242	\$46.63	40.8	\$1.143	\$54.41	43.7	\$1.245
1948: Average	45.54	39.7	1.147	58.64	40.5	1.448	48.84	40.1	1.218	54.78	40.1	1.306	50.06	40.9	1.224	57.25	43.6	1.313
1949: January	47.36	40.0	1.184	60.28	40.4	1.492	49.30	39.0	1.264	57.00	40.2	1.418	56.77	40.2	1.363	56.34	42.3	1.332
February	46.85	39.6	1.183	60.30	39.8	1.515	49.33	38.9	1.268	56.72	40.0	1.418	56.86	40.3	1.262	56.28	42.0	1.340
March	47.04	39.9	1.179	60.30	39.8	1.515	49.54	39.1	1.267	56.60	39.8	1.422	56.17	40.2	1.248	54.34	41.2	1.319
April	46.61	39.3	1.186	58.80	39.2	1.500	49.34	39.1	1.262	56.03	39.4	1.422	48.85	39.0	1.255	53.76	40.7	1.321
May	47.24	39.7	1.190	58.78	39.4	1.492	49.81	38.6	1.267	56.61	39.7	1.426	48.83	39.0	1.252	51.52	39.6	1.301
June	46.29	38.9	1.190	58.24	38.8	1.501	49.81	38.6	1.267	56.85	39.7	1.432	49.72	39.4	1.262	51.10	39.8	1.324
July	46.57	39.1	1.191	58.84	39.2	1.501	49.15	38.0	1.267	56.13	39.2	1.432	48.75	39.0	1.249	50.00	38.2	1.309
August	45.47	38.6	1.178	58.73	39.1	1.502	48.43	38.5	1.258	56.43	39.3	1.436	48.51	38.5	1.247	50.13	38.5	1.302
September	47.64	39.9	1.194	59.72	39.6	1.508	49.75	39.3	1.266	56.97	39.4	1.446	50.57	40.2	1.258	54.79	41.6	1.317
October	47.60	40.0	1.190	60.26	39.8	1.514	50.69	39.6	1.280	58.17	39.9	1.458	51.44	40.7	1.264	60.29	44.2	1.364
November	47.80	40.1	1.192	62.27	40.7	1.530	51.18	39.8	1.286	57.99	39.8	1.457	51.70	40.9	1.264	61.28	44.6	1.374
December	48.28	40.3	1.198	62.52	40.6	1.540	50.41	39.2	1.286	58.71	40.1	1.464	52.32	41.0	1.276	59.83	43.7	1.369
1950: January	46.41	38.9	1.193	61.60	40.0	1.540	49.77	38.7	1.286	58.64	40.0	1.466	51.66	40.3	1.282	55.79	42.2	1.322
Manufacturing—Continued																		
Manufacturing—Continued																		
Miscellaneous manufacturing industries—Continued																		
Jewelry and findings				Silverware and plated ware			Toys and sporting goods			Costume jewelry, buttons, notions			Other miscellaneous manufacturing industries					Transportation and public utilities
Jewelry and findings				Silverware and plated ware			Toys and sporting goods			Costume jewelry, buttons, notions			Other miscellaneous manufacturing industries					Class I railroads ⁷
1947: Average	\$48.40	41.3	\$1.172	\$59.23	45.6	\$1.299	\$44.46	40.2	\$1.106	\$42.03	39.5	\$1.056	\$46.89	40.7	\$1.152	\$54.22	45.3	\$1.171
1948: Average	50.47	41.2	1.225	62.38	45.4	1.374	47.24	40.1	1.178	45.39	40.1	1.154	50.39	40.7	1.208	59.27	40.2	1.283
1949: January	50.84	41.0	1.240	60.89	43.4	1.403	47.91	39.4	1.216	45.51	39.3	1.158	51.62	40.2	1.284	60.21	45.2	1.333
February	50.95	40.6	1.255	60.70	43.2	1.405	47.51	39.3	1.209	46.96	39.9	1.162	51.58	40.2	1.283	61.64	45.9	1.343
March	51.92	41.5	1.251	56.42	41.0	1.376	47.62	39.1	1.218	46.06	40.4	1.140	51.02	40.3	1.266	60.00	45.5	1.318
April	50.17	40.1	1.251	56.59	41.1	1.379	45.49	37.5	1.213	45.75	39.2	1.167	49.57	39.0	1.271	62.51	46.6	1.359
May	49.76	39.9	1.247	52.99	38.4	1.345	45.96	38.3	1.200	44.54	38.6	1.154	50.06	39.2	1.277	60.69	44.4	1.367
June	49.92	40.1	1.247	52.02	38.5	1.317	46.26	38.8	1.192	44.93	39.4	1.191	51.07	39.5	1.203	57.27	42.3	1.354
July	48.56	37.8	1.249	50.97	38.5	1.323	44.76	37.8	1.184	46.49	39.4	1.180	50.24	39.4	1.275	60.37	44.1	1.369
August	48.11	38.8	1.240	51.88	38.2	1.358	45.67	38.1	1.177	43.88	37.5	1.170	50.11	39.3	1.275	62.64	46.4	1.354
September	51.69	41.1	1.243	57.53	41.6	1.383	47.60	39.7	1.199	45.90	39.2	1.171	51.75	40.3	1.284	60.98	39.6	1.340
October	54.19	42.7	1.269	65.85	45.6	1.444	48.36	40.3	1.200	47.48	39.5	1.202	51.55	40.4	1.276	58.98	38.3	1.337
November	54.44	42.7	1.275	67.23	46.3	1.452	49.45	40.8	1.212	46.18	39.3	1.175	51.77	40.6	1.275	61.60	40.0	1.343
December	54.56	42.2	1.263	64.13	45.0	1.425	47.28	39.2	1.206	47.98	39.8	1.183	53.31	41.2	1.294	61.45	39.9	1.347
1950: January	51.75	41.3	1.253	59.00	43.0	1.372	48.39	39.5	1.225	47.40	39.7	1.194	52.67	40.3	1.307	—	—	—

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Transportation and public utilities—Continued																		
	Local railways and bus lines ²				Communication								Telegraph ³						
	Telephone ⁴		Switchboard operating employees ⁵		Line construction, installation, and maintenance employees ⁶		Telegraph ³												
Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings	Avg. wky. hours	Avg. wky. earnings			
1947: Average.....	\$57.14	46.8	\$1.221	\$44.77	57.4	\$1.197	—	—	—	—	—	—	—	\$53.56	44.6	\$1.201			
1948: Average.....	61.73	45.1	1.339	48.92	59.2	1.248	—	—	—	—	—	—	—	60.26	44.7	1.345			
1949: January.....	63.82	45.1	1.415	49.84	28.4	1.298	—	—	—	—	—	—	—	61.58	44.3	1.390			
February.....	64.18	45.1	1.423	50.84	28.6	1.317	—	—	—	—	—	—	—	61.94	44.5	1.392			
March.....	64.18	45.2	1.420	50.82	28.3	1.327	—	—	—	—	—	—	—	62.31	44.7	1.394			
April.....	64.64	45.2	1.430	50.58	28.2	1.324	—	—	—	—	—	—	—	63.37	45.3	1.399			
May.....	64.48	44.9	1.436	51.84	28.6	1.343	—	—	—	—	—	—	—	63.69	45.2	1.409			
June.....	66.01	46.0	1.435	51.49	28.4	1.341	\$44.30	36.7	\$1.207	\$68.52	41.6	\$1.647	62.96	45.0	1.399				
July.....	65.21	45.1	1.446	51.90	38.5	1.346	44.81	37.0	1.211	69.06	41.6	1.660	63.97	45.4	1.409				
August.....	64.46	44.7	1.442	51.57	38.4	1.341	44.23	36.8	1.223	69.22	41.6	1.664	63.64	45.1	1.411				
September.....	64.55	44.3	1.457	52.61	38.6	1.363	45.37	37.1	1.203	70.10	41.7	1.681	62.83	44.5	1.412				
October.....	64.31	44.2	1.455	53.29	38.7	1.377	46.35	37.2	1.245	70.35	41.6	1.691	62.97	44.5	1.415				
November.....	64.17	44.1	1.455	54.40	38.8	1.402	48.04	37.3	1.284	71.35	41.7	1.711	62.05	43.7	1.420				
December.....	65.28	44.5	1.467	52.57	38.4	1.369	44.42	36.5	1.217	70.89	41.8	1.690	62.23	43.7	1.424				
1950: January.....	63.22	44.1	1.479	53.21	38.5	1.382	44.61	36.3	1.229	72.38	42.3	1.711	62.84	44.1	1.425				
Transportation and public utilities—Continued				Trade															
Other public utilities				Wholesale trade				Retail trade				Retail trade (except eating and drinking places)				Retail trade			
Gas and electric utilities				Retail trade (except eating and drinking places)				General merchandise stores				Department stores and general mail-order houses							
1947: Average.....	\$56.69	41.9	\$1.353	\$51.99	41.0	\$1.265	\$40.66	40.3	\$1.009	\$30.96	36.3	\$0.853	\$34.85	37.6	\$0.927				
1948: Average.....	60.74	41.8	1.458	53.58	40.9	1.359	43.85	40.3	1.088	33.31	36.6	0.916	37.36	37.7	0.991				
1949: January.....	63.08	41.8	1.509	57.24	40.8	1.403	45.51	40.2	1.132	44.42	36.5	.943	38.70	37.7	1.029				
February.....	62.60	41.4	1.512	56.82	40.5	1.403	45.14	40.2	1.123	34.01	36.3	.907	37.96	37.4	1.015				
March.....	62.54	41.5	1.507	56.88	40.6	1.401	44.95	40.1	1.121	33.68	36.1	.903	37.86	37.3	1.015				
April.....	62.82	41.3	1.521	57.12	40.6	1.407	45.31	40.2	1.127	34.26	36.6	.908	38.80	37.6	1.032				
May.....	63.40	41.3	1.532	57.83	40.7	1.421	45.98	40.3	1.141	34.85	36.3	.909	39.33	37.6	1.048				
June.....	63.64	41.3	1.541	57.49	40.6	1.416	46.45	40.5	1.147	35.06	36.6	.908	39.95	37.8	1.057				
July.....	64.02	41.3	1.550	58.18	40.8	1.426	46.95	40.6	1.158	35.89	37.2	.964	39.79	38.0	1.047				
August.....	63.92	41.4	1.544	57.10	40.7	1.403	46.87	40.9	1.146	35.75	37.2	.961	39.58	37.8	1.047				
September.....	64.75	41.4	1.564	57.35	40.7	1.409	46.58	40.5	1.150	35.17	36.6	.961	39.48	37.6	1.050				
October.....	65.72	41.7	1.576	58.36	40.9	1.427	46.06	40.4	1.149	34.65	36.4	.952	38.90	37.4	1.040				
November.....	65.03	41.5	1.567	57.86	40.6	1.425	45.63	40.1	1.138	34.30	36.3	.945	38.75	37.4	1.036				
December.....	66.24	41.9	1.581	58.14	40.8	1.425	45.67	40.7	1.122	35.31	37.8	.953	41.30	39.6	1.043				
1950: January.....	66.78	42.0	1.590	58.24	40.5	1.438	46.66	40.4	1.155	35.13	36.4	.965	39.25	37.2	1.055				
Trade—Continued																			
Retail trade—Continued																			
Food and liquor stores				Automotive and accessories dealers				Apparel and accessories stores				Furniture and appliance stores				Other retail trade			
1947: Average.....	\$43.51	40.7	\$1.069	\$51.80	45.4	\$1.141	\$38.08	36.9	\$1.032	\$48.90	42.9	\$1.142	\$45.20	43.5	\$1.039				
1948: Average.....	47.15	40.3	1.170	56.07	45.4	1.235	39.60	36.5	1.085	51.15	42.7	1.198	49.37	43.5	1.135				
1949: January.....	49.07	39.8	1.233	57.25	45.4	1.261	41.11	36.8	1.117	52.74	42.6	1.228	50.25	43.1	1.166				
February.....	49.12	40.0	1.228	57.15	45.3	1.256	39.79	36.4	1.063	52.36	43.2	1.212	50.87	43.0	1.183				
March.....	49.87	39.7	1.231	57.18	45.7	1.273	39.64	36.3	1.092	52.02	43.1	1.207	51.20	43.5	1.177				
April.....	49.69	40.0	1.237	59.50	45.7	1.302	40.88	36.7	1.114	52.82	43.4	1.217	51.35	43.3	1.186				
May.....	49.20	39.7	1.234	60.00	45.8	1.310	40.92	36.8	1.112	53.29	43.5	1.225	52.48	44.1	1.190				
June.....	50.26	40.4	1.244	59.70	45.5	1.312	40.85	36.7	1.113	53.16	43.5	1.222	51.96	43.7	1.189				
July.....	51.13	41.1	1.244	59.83	45.6	1.312	40.37	36.5	1.106	52.78	43.3	1.219	52.34	43.8	1.195				
August.....	51.00	41.0	1.244	59.55	45.6	1.306	40.52	36.8	1.101	52.82	43.4	1.217	52.40	44.0	1.191				
September.....	50.57	40.2	1.258	59.51	45.5	1.308	41.66	37.1	1.123	53.37	43.6	1.224	52.18	43.7	1.194				
October.....	50.25	40.3	1.247	59.39	45.9	1.294	40.15	36.6	1.097	53.38	43.4	1.230	52.96	44.1	1.201				
November.....	50.37	40.1	1.256	58.78	45.6	1.269	40.26	36.5	1.103	54.32	43.7	1.243	51.79	43.3	1.196				
December.....	50.54	40.3	1.254	58.21	45.8	1.271	41.18	36.9	1.116	56.52	44.4	1.273	52.10	43.6	1.195				
1950: January.....	50.63	39.9	1.260	59.17	45.9	1.269	41.36	36.8	1.124	55.40	44.0	1.239	51.30	43.0	1.193				

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings of Production Workers or Nonsupervisory Employees¹—Con.

Year and month	Finance ¹²			Service								Motion picture production and distribution ¹³	
	Banks and trust companies	Security dealers and exchanges	Insurance carriers	Hotels, year-round ¹⁴				Laundries		Cleaning and dyeing plants			
				Avg. wky. earnings	Avg. wky. earnings	Avg. wky. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours	Avg. hrly. earnings	Avg. wky. hours		
1947: Average.....	\$30.46	\$63.08	\$32.58	\$29.35	45.2	\$0.650	\$32.71	42.6	\$0.787	\$38.30	41.9	\$0.914	
1948: Average.....	41.51	66.83	54.93	31.81	44.3	.709	34.23	41.9	.817	39.50	41.1	.981	
1949: January.....	43.92	68.41	57.84	32.41	44.1	.735	35.49	42.1	.843	40.37	40.9	.987	
February.....	43.55	67.80	56.88	32.47	44.0	.738	34.90	41.8	.841	39.32	40.0	.983	
March.....	43.24	66.46	56.67	32.53	44.8	.731	35.07	41.5	.845	39.93	40.5	.988	
April.....	43.49	67.48	56.48	32.35	44.2	.732	35.24	41.8	.843	42.15	42.4	.984	
May.....	44.05	67.82	57.26	32.99	44.7	.738	36.04	42.4	.850	43.17	42.7	1.011	
June.....	43.10	66.12	56.59	32.85	44.1	.745	35.32	41.6	.849	42.17	42.3	.997	
July.....	43.80	65.70	56.70	32.90	44.1	.746	35.03	41.8	.844	40.48	41.0	.986	
August.....	43.10	65.55	55.54	32.93	44.2	.745	34.27	40.8	.840	38.63	39.5	.978	
September.....	43.62	67.29	55.33	32.90	44.1	.746	34.69	41.2	.842	41.28	41.7	.990	
October.....	43.94	71.25	56.04	32.84	44.2	.743	34.57	41.1	.841	40.15	41.1	.977	
November.....	43.96	72.54	55.89	33.13	44.0	.733	34.28	40.9	.837	39.95	40.9	.977	
December.....	43.96	74.36	56.47	33.14	43.9	.755	34.61	41.2	.840	40.22	41.0	.981	
1950: January.....	45.17	75.97	57.70	32.81	43.8	.749	35.07	41.5	.845	40.65	41.4	.982	
												88.19	

¹ These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked during, or received pay for, the pay period ending nearest the 15th of the month. For mining, manufacturing, laundries, and cleaning and dyeing plants industries, the data relate to production and related workers only. For the remaining industries, unless otherwise noted, the data relate to nonsupervisory employees and working supervisors. All series, beginning with January 1947, are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired. Data for the two current months are subject to revision without notation; revised figures for earlier months will be identified by an asterisk for the first month's publication of such data.

² Data relate to all construction workers, both on-site and off-site, engaged in actual construction work including pre-assembly and pre-cutting operations. Both privately and publicly financed construction are included. Data are based on comparable but not necessarily identical samples.

³ Includes ordnance and accessories; lumber and wood products (except furniture); furniture and fixtures; stone, clay, and glass products; primary metal industries; fabricated metal products (except ordnance, machinery, and transportation equipment); machinery (except electrical); electrical machinery, apparatus, and supplies; instruments and related products; and miscellaneous manufacturing industries.

⁴ Includes food and kindred products; tobacco manufacturers; textile-mill products; apparel and other finished textile products; paper and allied products; printing, publishing, and allied industries; chemicals and allied products; products of petroleum and coal; rubber products; and leather and leather products.

⁵ Data by region, North and South, from January 1949, are available upon request.

⁶ Data by region, South and West, from January 1949, are available upon request.

⁷ These averages are based on reports summarized in the M-300 report prepared by the Interstate Commerce Commission, and relate to all hourly rated employees who received pay during the month. Most executive,

professional, and supervisory personnel are excluded. Switching and terminal companies are excluded. The annual average data include retroactive pay when such payments are made. Monthly data do not include retroactive payments. Beginning with September 1, 1949, data reflect the following changes for nonoperative employees (about two-thirds of the total): (1) scheduled weekly hours were reduced from 48 to 40; (2) hourly rates were adjusted to maintain the former weekly earnings for 48 hours; (3) an additional wage increase of \$0.07 an hour was granted.

⁸ Data include privately and municipally operated local railways and bus lines.

⁹ Through May 1949 the averages relate mainly to the hours and earnings of employees subject to the Fair Labor Standards Act. Beginning with June 1949 the averages relate to the hours and earnings of nonsupervisory employees. Data for June comparable with the earlier series are \$31.47, 38.5 hours, and \$1.337.

¹⁰ Data include employees such as switchboard operators, service assistants, operating-room instructors, and pay-station attendants.

¹¹ Data include employees such as central office craftsmen; installation and exchange repair craftsmen; line, cable, and conduit craftsmen; and laborers.

¹² Data relate mainly to land-line employees, excluding employees compensated on a commission basis, general and divisional headquarters personnel, trainees in school, and messengers.

¹³ Data on average weekly hours and average hourly earnings are not available.

¹⁴ Money payments only; additional value of board, room, uniforms, and tips, not included.

¹⁵ Formerly shown separately as "heavy construction" and "other construction."

¹⁶ Comparable data from January 1948 are available upon request.

¹⁷ Comparable data from January 1947 are available upon request.

TABLE C-2: Gross Average Weekly Earnings of Production Workers in Selected Industries, in Current and 1939 Dollars¹

Year and month	Manufacturing		Bituminous-coal mining		Laundries		Year and month	Manufacturing		Bituminous-coal mining		Laundries	
	Current dollars	1939 dollars	Current dollars	1939 dollars	Current dollars	1939 dollars		Current dollars	1939 dollars	Current dollars	1939 dollars	Current dollars	1939 dollars
1947: Average.....	\$48.97	\$31.20	\$66.59	\$41.88	\$32.71	\$20.42	1949: July.....	\$54.63	\$32.23	\$47.94	\$28.28	\$35.03	\$20.66
1948: Average.....	54.14	31.43	72.12	41.87	34.23	19.87	August.....	54.70	32.21	52.46	29.15	34.27	20.18
1949: January.....	55.80	32.28	76.32	\$4.39	35.49	20.64	September.....	55.72	32.68	52.46	30.75	34.69	20.33
February.....	55.20	32.47	73.56	42.27	34.90	20.53	October.....	55.26	32.60	63.10	37.22	34.57	20.39
March.....	54.74	32.10	70.54	41.37	35.07	20.57	November.....	54.43	32.06	68.17	40.19	34.23	20.18
April.....	53.80	31.51	72.33	42.37	35.24	20.64	December ²	56.18	33.34	48.93	29.04	34.61	20.54
May.....	54.08	31.77	72.98	42.87	36.04	21.17	1950: January ³	56.33	33.55	47.62	28.36	35.07	20.89
June.....	54.51	31.95	59.90	35.11	35.32	20.70							

¹ These series indicate changes in the level of weekly earnings prior to and after adjustment for changes in purchasing power as determined from the Bureau's Consumers' Price Index, the year 1939 having been selected for the base period. Estimates of World War II and postwar understatement by the

Consumers' Price Index were not included. See the Monthly Labor Review, March 1947, p. 498. See Note, table C-1. Comparable data from January 1947 are available upon request to the Bureau of Labor Statistics.

² Preliminary.

TABLE C-3: Gross and Net Spendable Average Weekly Earnings of Production Workers in Manufacturing Industries, in Current and 1939 Dollars¹

Period	Gross average weekly earnings		Net spendable average weekly earnings		Period	Gross average weekly earnings		Net spendable average weekly earnings			
			Worker with no dependents	Worker with 3 dependents				Worker with no dependents	Worker with 3 dependents		
	Amount	Index (1939=100)	Current dollars	1939 dollars		Amount	Index (1939=100)	Current dollars	1939 dollars		
1941: January	\$26.64	111.7	\$25.41	\$25.06	1949: January	\$35.50	\$322.6	\$48.57	\$28.25	\$34.31	\$31.89
1945: January	47.80	190.1	39.40	30.81	February	55.20	231.3	48.32	28.42	54.06	31.80
July	45.45	190.5	37.80	29.04	March	54.74	220.4	47.93	28.11	53.67	31.47
1946: June	43.31	181.5	37.30	27.81	April	53.80	215.5	47.14	27.61	52.88	30.97
1939: Average	23.86	100.0	23.58	23.58	May	54.08	220.7	47.26	27.83	53.12	31.21
1940: Average	23.86	103.6	24.49	24.75	June	54.51	228.5	47.74	27.98	53.45	31.34
1941: Average	29.68	120.0	28.05	26.21	July	54.83	229.0	47.84	28.22	53.61	31.51
1942: Average	36.65	133.4	31.77	27.11	August	54.70	229.3	47.91	28.21	53.64	31.50
1943: Average	43.14	180.8	36.01	28.97	September	55.72	229.6	48.73	28.57	54.50	31.64
1944: Average	46.08	193.1	38.29	30.32	October	55.66	231.6	48.37	28.83	54.11	31.92
1945: Average	44.39	196.0	34.97	28.61	November	54.43	228.1	47.67	28.10	53.41	31.49
1946: Average	43.74	183.3	37.65	28.87	December	56.18	235.5	49.13	29.16	54.88	32.57
1947: Average	46.97	209.4	42.76	26.70	1950: January	56.33	236.1	48.97	29.16	54.73	32.60
1948: Average	54.14	226.9	47.43	27.54							

¹ Net spendable average weekly earnings are obtained by deducting from gross average weekly earnings, social security and income taxes for which the specified type of worker is liable. The amount of income tax liability depends, of course, on the number of dependents supported by the worker as well as on the level of his gross income. Net spendable earnings have, therefore, been computed for 2 types of income-receivers: (1) A worker with no dependents; (2) A worker with 3 dependents.

The computation of net spendable earnings for both the factory worker with no dependents and the factory worker with 3 dependents are based upon the

gross average weekly earnings for all production workers in manufacturing industries without direct regard to marital status and family composition. The primary value of the spendable series is that of measuring relative changes in disposable earnings for 2 types of income-receivers. That series does not, therefore, reflect actual differences in levels of earnings for workers of varying age, occupation, skill, family composition, etc. See Note, table C-4. Comparable data from January 1947 are available upon request to the Bureau of Labor Statistics.

² Preliminary.

TABLE C-4: Average Hourly Earnings, Gross and Exclusive of Overtime, of Production Workers in Manufacturing Industries¹

Period	Manufacturing		Durable goods		Nondurable goods		Period	Manufacturing		Durable goods		Nondurable goods			
	Gross amount	Excluding overtime		Gross	Excluding overtime	Gross		Gross amount	Excluding overtime		Gross	Excluding overtime	Gross	Excluding overtime	
		Amount	Index (1939=100)						Amount	Index (1939=100)					
1947: Average	\$1.237	\$1.108	180.3	\$1.292	\$1.200	\$1.171	\$1.133	1949: July	\$1.408	\$1.376	\$217.4	\$1.477	\$1.447	\$1.332	\$1.298
1948: Average	1.330	207.0	1.410	1.366	1.278	1.241	1.204	August	1.399	1.366	215.8	1.473	1.440	1.319	1.286
1949: January	1.405	1.267	216.0	1.487	1.427	1.227	1.204	September	1.407	1.369	216.3	1.482	1.444	1.328	1.290
February	1.401	1.396	215.8	1.486	1.428	1.223	1.201	October	1.393	1.363	217.7	1.458	1.425	1.325	1.287
March	1.400	1.338	216.1	1.464	1.430	1.223	1.204	November	1.392	1.357	214.4	1.457	1.425	1.325	1.289
April	1.401	1.373	216.9	1.467	1.437	1.221	1.204	December	1.408	1.369	216.3	1.475	1.435	1.335	1.297
May	1.401	1.371	216.6	1.467	1.437	1.223	1.204	1950: January	1.419	1.381	218.2	1.486	1.446	1.344	1.308
June	1.405	1.373	216.9	1.475	1.443	1.224	1.203								

¹ Overtime is defined as work in excess of 40 hours per week and paid for at time and one-half. The computation of average hourly earnings exclusive of overtime makes no allowance for special rates of pay for work done on holi-

days. See Note, table C-4. Comparable data from January 1947 are available upon request to the Bureau of Labor Statistics.

² Preliminary.

Notes: Explanatory notes outlining briefly the concepts, methodology, size of the reporting sample, and sources used in preparing the data presented in tables C-1 through C-4, are contained in the Bureau's monthly mimeographed release, "Hours and Earnings—Industry Report," which is available upon request.

D: Prices and Cost of Living

TABLE D-1: Consumers' Price Index¹ for Moderate-Income Families in Large Cities, by Group of Commodities

[1935-39=100]

Year and month	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration ²				Housefurnishings	Miscellaneous ³
					Total	Gas and electricity	Other fuels	Ice		
1913: Average.....	70.7	79.9	69.3	92.2	61.9	(4)	(4)	(4)	89.1	89.9
1914: July.....	71.7	81.7	69.8	92.2	62.3	(4)	(4)	(4)	80.8	82.0
1918: December.....	118.0	149.6	147.9	97.1	90.4	(4)	(4)	(4)	121.2	83.1
1920: June.....	149.4	185.0	209.7	119.1	104.8	(4)	(4)	(4)	169.7	100.7
1929: Average.....	122.5	132.5	115.3	141.4	112.5	(4)	(4)	(4)	111.7	104.6
1932: Average.....	97.6	86.5	90.8	116.9	103.4	(4)	(4)	(4)	85.4	101.7
1939: Average.....	99.4	95.2	100.5	104.3	99.0	98.9	99.1	100.2	101.3	100.7
August 15.....	98.6	93.5	100.3	104.3	97.5	99.0	95.2	100.0	100.6	100.4
1940: Average.....	100.2	96.6	101.7	104.6	99.7	98.0	101.9	100.4	100.5	101.1
1941: Average.....	105.2	105.5	106.3	106.2	102.2	97.1	108.2	104.1	107.3	104.0
January 1.....	100.8	97.6	101.2	105.0	100.8	97.5	105.4	100.3	100.2	101.8
December 15.....	110.5	113.1	114.8	108.2	104.1	96.7	113.1	105.1	116.8	107.7
1942: Average.....	116.5	123.9	124.2	108.5	105.4	96.7	115.1	110.0	122.2	110.9
1943: Average.....	123.6	138.0	129.7	108.0	107.7	96.1	120.7	114.2	125.6	115.8
1944: Average.....	125.5	136.1	138.8	108.2	109.8	98.8	126.0	115.8	136.4	121.3
1945: Average.....	128.4	139.1	145.9	108.3	110.3	98.0	128.3	115.9	145.8	124.1
August 15.....	129.3	140.9	146.4	(4)	111.4	95.2	131.0	115.8	146.0	124.5
1946: Average.....	139.3	159.6	160.2	108.5	112.4	92.4	136.9	115.9	159.2	128.8
June 15.....	133.3	145.6	157.2	108.5	110.5	92.1	133.0	115.1	156.1	127.9
November 15.....	152.2	187.7	171.0	(4)	114.8	91.8	142.6	117.9	171.0	132.5
1947: Average.....	159.2	183.8	185.8	111.2	121.1	92.0	156.1	125.9	184.4	130.9
December 15.....	167.0	206.9	191.2	115.4	127.8	92.6	171.1	129.8	191.4	144.4
1948: Average.....	171.2	210.2	198.0	117.4	133.9	94.3	183.4	135.2	195.8	149.9
December 15.....	171.4	205.0	200.4	119.5	137.8	95.3	191.3	138.4	198.6	154.0
1949: Average.....	169.1	201.9	190.1	120.8	137.5	96.7	187.7	141.7	180.0	154.6
February 15.....	169.0	199.7	195.1	119.9	138.8	96.1	192.6	140.0	195.6	154.1
March 15.....	169.5	201.6	193.9	120.1	138.9	96.1	192.5	140.4	193.8	154.4
April 15.....	169.7	202.8	192.5	120.3	137.4	96.8	187.8	140.5	191.9	154.6
May 15.....	169.2	202.4	191.3	120.4	135.4	96.9	182.7	140.1	189.5	154.5
June 15.....	169.6	204.3	190.3	120.6	135.6	96.9	183.0	140.0	187.3	154.2
July 15.....	168.5	201.7	188.5	120.7	135.6	96.9	183.1	139.9	186.8	154.3
August 15.....	168.8	202.6	187.4	120.8	135.8	97.1	183.1	141.1	184.8	154.8
September 15.....	169.6	204.2	187.2	121.2	137.0	97.1	185.9	141.5	185.6	155.2
October 15.....	168.5	200.6	186.8	121.5	138.4	97.0	185.3	145.6	185.2	155.2
November 15.....	168.6	200.8	186.3	122.0	139.1	97.0	190.0	146.6	185.4	154.9
December 15.....	167.5	197.3	185.8	122.2	139.7	97.2	191.6	145.5	185.4	155.8
1950: January 15.....	166.9	196.0	185.0	122.6	140.0	96.7	193.1	145.5	184.7	155.1
February 15.....	166.5	194.8	184.8	122.5	140.3	97.1	193.2	145.5	185.3	155.1

¹ The "Consumers' price index for moderate-income families in large cities," formerly known as the "Cost of living index," measures average changes in retail prices of selected goods and services, weighted by quantities bought in 1934-36 by families of wage earners and moderate-income workers in large cities whose incomes averaged \$1,524 in 1934-36.

Bureau of Labor Statistics Bulletin 699, Changes in Cost of Living in Large Cities in the United States, 1913-41, contains detailed description of methods used in constructing this index. Additional information on the consumers' price index is given in a compilation of reports published by the Office of Economic Stabilization, Report of the President's Committee on the Cost of Living.

Mimeographed tables are available upon request showing indexes for each of the cities regularly surveyed by the Bureau and for each of the major groups of living essentials. Indexes for all large cities combined are available since 1913. The beginning date for series of indexes for individual cities

varies from city to city but indexes are available for most of the 34 cities since World War I.

² The group index formerly entitled "Fuel, electricity, and ice" is now designated "Fuel, electricity, and refrigeration". Indexes are comparable with those previously published for "Fuel, electricity, and ice." The subgroup "Other fuels and ice" has been discontinued; separate indexes are presented for "Other fuels" and "Ice."

³ The miscellaneous group covers transportation (such as automobiles and their upkeep and public transportation fares); medical care (including professional care and medicines); household operation (covering supplies and other kinds of paid services); recreation (that is, newspapers, motion pictures and tobacco products); personal care (barber- and beauty-shop service and toilet articles); etc.

⁴ Data not available.

⁵ Rents not surveyed this month.

TABLE D-2: Consumers' Price Index for Moderate-Income Families, by City,¹ for Selected Periods

[1935-39=100]

City	Feb. 15, 1950	Jan. 15, 1950	Dec. 15, 1949	Nov. 15, 1949	Oct. 15, 1949	Sept. 15, 1949	Aug. 15, 1949	July 15, 1949	June 15, 1949	May 15, 1949	Apr. 15, 1949	Mar. 15, 1949	Feb. 15, 1949	June 15, 1948	Aug. 15, 1948
Average.....	166.5	166.9	167.5	168.6	168.5	169.6	168.8	168.5	169.6	169.2	169.7	169.5	169.0	169.0	168.6
Atlanta, Ga.....	168.3	(9)	(9)	170.5	(9)	(9)	172.3	(9)	(9)	170.5	(9)	(9)	170.1	133.8	98.0
Baltimore, Md.....	(9)	(9)	170.9	170.9	(9)	(9)	174.0	(9)	174.2	(9)	(9)	177.9	(9)	135.6	98.7
Birmingham, Ala.....	166.4	166.9	166.4	170.5	170.3	171.8	171.1	171.0	172.1	171.4	171.6	171.8	171.7	135.5	98.5
Boston, Mass.....	160.7	161.5	162.7	164.0	164.1	165.4	163.6	162.6	163.3	162.2	162.4	162.5	161.4	127.9	97.1
Buffalo, N. Y.....	(9)	164.8	(9)	(9)	167.4	(9)	(9)	169.4	(9)	(9)	168.3	(9)	(9)	132.6	98.5
Chicago, Ill.....	172.0	172.3	173.2	175.3	174.4	175.8	174.4	173.9	175.9	174.2	175.0	174.5	172.9	130.9	98.7
Cincinnati, Ohio.....	167.2	167.7	167.8	168.3	168.7	170.8	168.8	168.7	170.5	169.1	170.7	170.7	169.7	132.2	97.3
Cleveland, Ohio.....	166.7	(9)	(9)	170.3	(9)	(9)	171.6	(9)	(9)	171.5	(9)	(9)	(9)	127.5	100.0
Denver, Colo.....	(9)	164.5	(9)	(9)	164.6	(9)	(9)	167.8	(9)	(9)	166.9	(9)	(9)	131.7	98.6
Detroit, Mich.....	168.1	168.5	169.1	169.8	165.7	170.4	169.9	170.4	172.0	171.6	171.1	170.8	170.7	136.4	98.5
Houston, Tex.....	172.0	172.8	173.2	173.3	172.0	171.4	170.4	170.4	170.5	170.6	171.0	170.2	170.2	130.5	100.7
Indianapolis, Ind.....	(9)	170.6	(9)	(9)	172.1	(9)	(9)	171.0	(9)	(9)	171.9	(9)	(9)	131.9	98.0
Jacksonville, Fla.....	(9)	(9)	175.5	(9)	(9)	(9)	176.5	(9)	(9)	174.0	(9)	(9)	174.3	(9)	138.4
Kansas City, Mo.....	(9)	160.6	(9)	(9)	161.1	(9)	(9)	162.1	(9)	(9)	163.3	(9)	(9)	129.4	98.6
Los Angeles, Calif.....	166.1	166.9	165.4	166.6	166.5	167.1	166.8	167.2	168.7	169.6	171.2	171.0	* 171.3	136.1	100.5
Manchester, N. H.....	(9)	167.1	(9)	(9)	169.3	(9)	(9)	170.0	(9)	(9)	170.6	(9)	(9)	134.7	97.8
Memphis, Tenn.....	(9)	(9)	170.8	(9)	(9)	(9)	172.7	(9)	(9)	173.5	(9)	(9)	173.3	(9)	134.5
Milwaukee, Wis.....	167.6	(9)	(9)	168.4	(9)	(9)	166.9	(9)	(9)	169.3	(9)	(9)	168.7	131.2	97.0
Minneapolis, Minn.....	(9)	(9)	167.4	(9)	(9)	(9)	165.3	(9)	(9)	169.1	(9)	(9)	160.3	(9)	129.4
Mobile, Ala.....	(9)	(9)	167.4	(9)	(9)	(9)	169.2	(9)	(9)	170.3	(9)	(9)	171.1	(9)	132.8
New Orleans, La.....	170.6	(9)	(9)	173.3	(9)	(9)	173.8	(9)	(9)	172.5	(9)	(9)	173.2	138.0	99.7
New York, N. Y.....	163.7	163.7	164.9	165.8	165.9	167.6	166.8	167.1	167.0	166.8	168.1	167.4	166.8	133.8	99.0
Norfolk, Va.....	167.1	(9)	(9)	168.2	(9)	(9)	170.2	(9)	(9)	170.3	(9)	(9)	170.6	135.2	97.8
Philadelphia, Pa.....	165.1	165.9	167.3	168.6	168.9	169.6	168.7	167.5	169.2	169.9	169.6	169.0	168.5	132.6	97.8
Pittsburgh, Pa.....	169.5	169.9	170.3	171.3	171.1	172.3	172.4	171.9	173.1	172.9	173.0	172.7	172.1	134.7	98.4
Portland, Maine.....	(9)	(9)	162.8	(9)	(9)	(9)	164.9	(9)	(9)	165.8	(9)	(9)	165.0	(9)	128.7
Portland, Oreg.....	(9)	173.8	(9)	(9)	173.6	(9)	(9)	* 175.1	(9)	(9)	177.6	(9)	(9)	140.3	100.1
Richmond, Va.....	(9)	161.8	(9)	(9)	164.9	(9)	(9)	164.4	(9)	(9)	164.2	(9)	(9)	128.2	98.0
St. Louis, Mo.....	(9)	(9)	167.8	(9)	(9)	(9)	166.9	(9)	(9)	166.8	(9)	(9)	160.0	(9)	131.2
San Francisco, Calif.....	(9)	(9)	171.5	(9)	(9)	(9)	173.0	(9)	(9)	173.7	(9)	(9)	174.6	(9)	137.8
Savannah, Ga.....	(9)	169.1	(9)	(9)	173.4	(9)	(9)	173.3	(9)	(9)	174.9	(9)	(9)	140.6	99.3
Scranton, Pa.....	163.7	(9)	(9)	166.3	(9)	(9)	169.5	(9)	(9)	168.4	(9)	(9)	166.8	132.2	96.0
Seattle, Wash.....	171.6	(9)	(9)	171.6	(9)	(9)	170.8	(9)	(9)	172.5	(9)	(9)	174.3	137.0	100.3
Washington, D. C.....	163.6	(9)	(9)	166.2	(9)	(9)	166.0	(9)	(9)	165.3	(9)	(9)	164.1	133.8	98.6

¹ The indexes are based on time-to-time changes in the cost of goods and services purchased by moderate-income families in large cities. They do not indicate whether it costs more to live in one city than in another.

* Through June 1947, consumers' price indexes were computed monthly for

21 cities and in March, June, September, and December for 13 additional cities; beginning July 1947 indexes were computed monthly for 10 cities and once every 3 months for 24 additional cities according to a staggered schedule.

* Corrected.

TABLE D-3: Consumers' Price Index for Moderate-Income Families, by City and Group of Commodities¹

[1935-39=100]

City	Food		Apparel		Rent		Fuel, electricity, and refrigeration				Housefurnishings		Miscellaneous		
							Total		Gas and electricity						
	Feb. 15 1950	Jan. 15 1950	Feb. 15 1950	Jan. 15 1950	Feb. 15 1950	Jan. 15 1950	Feb. 15 1950	Jan. 15 1950	Feb. 15 1950	Jan. 15 1950	Feb. 15 1950	Jan. 15 1950	Feb. 15 1950	Jan. 15 1950	
Average	194.8	196.0	184.8	185.0	122.8	122.6	140.3	140.0	97.1	96.7	185.3	184.7	155.1	155.1	
Atlanta, Ga.	190.0	192.5	191.9	(1)	127.1	(2)	155.3	155.4	83.4	83.4	186.5	(1)	159.7	(1)	
Baltimore, Md.	205.0	206.6	(1)	(1)	(1)	(1)	151.7	151.5	128.8	128.3	(1)	(1)	(1)	(1)	
Birmingham, Ala.	184.5	186.4	194.8	194.8	143.7	143.1	136.5	135.5	79.6	79.6	170.7	177.8	149.9	150.0	
Boston, Mass.	184.8	186.6	174.4	174.9	118.5	118.2	153.6	155.1	117.6	117.6	177.5	177.7	153.4	153.3	
Buffalo, N. Y.	189.6	189.8	(1)	(1)	179.8	(3)	125.1	146.5	110.0	110.0	(1)	183.0	(1)	157.1	
Chicago, Ill.	198.6	199.9	189.5	190.0	142.1	141.7	135.1	134.3	83.5	83.5	169.6	169.4	169.0	159.0	
Cincinnati, Ohio	196.8	197.4	183.5	183.1	115.8	115.7	150.4	149.5	101.9	101.9	175.7	177.1	154.8	154.8	
Cleveland, Ohio	201.8	202.6	183.4	(1)	128.6	(2)	148.5	148.2	105.6	105.6	168.4	(1)	151.4	(1)	
Denver, Colo.	195.2	196.8	(1)	(1)	181.3	(3)	126.0	112.2	69.2	69.2	(1)	205.3	(1)	149.9	
Detroit, Mich.	190.4	191.8	180.8	181.3	129.9	129.8	150.3	149.4	89.9	89.7	195.9	195.5	166.3	166.3	
Houston, Tex.	205.6	207.7	195.6	196.7	142.9	142.0	98.9	98.9	82.4	82.3	185.5	186.3	157.5	157.6	
Indianapolis, Ind.	191.2	192.3	(1)	181.9	(9)	133.0	164.4	162.8	86.6	86.6	(1)	174.4	(1)	161.9	
Jacksonville, Fla.	198.7	200.7	(1)	(1)	(1)	(1)	149.2	148.2	100.5	100.5	(1)	(1)	(1)	(1)	
Kansas City, Mo.	182.7	183.6	(1)	(1)	178.2	(1)	126.9	126.8	65.8	67.0	(1)	176.1	(1)	155.0	
Los Angeles, Calif.	198.3	201.4	181.7	180.7	127.8	127.0	100.2	95.1	95.5	89.3	184.6	183.6	153.6	154.4	
Manchester, N. H.	189.9	191.6	(1)	(1)	176.2	(1)	115.2	152.3	154.8	98.8	97.9	(1)	192.8	(1)	149.1
Memphis, Tenn.	202.2	203.1	(1)	(1)	(1)	(1)	140.3	140.3	77.0	77.0	(1)	(1)	(1)	(1)	
Milwaukee, Wis.	196.6	196.3	185.4	(1)	134.0	(1)	145.5	145.4	99.6	99.6	185.8	(1)	146.9	(1)	
Minneapolis, Minn.	188.3	189.1	(1)	(1)	(1)	(1)	142.2	141.6	79.6	79.6	(1)	(1)	(1)	(1)	
Mobile, Ala.	194.8	196.4	(1)	(1)	(1)	(1)	120.2	129.1	84.3	84.0	(1)	(1)	(1)	(1)	
New Orleans, La.	206.9	206.9	196.8	(1)	115.5	(9)	113.1	113.1	75.1	75.1	190.4	(1)	145.1	(1)	
New York, N. Y.	195.3	195.9	182.5	182.4	108.9	108.9	139.6	139.7	102.0	102.0	174.2	172.5	158.8	157.9	
Norfolk, Va.	195.0	194.8	179.0	(1)	116.5	(9)	159.5	157.8	106.4	102.6	184.5	(1)	154.5	(1)	
Philadelphia, Pa.	189.5	191.3	181.2	182.4	121.6	121.5	143.9	143.8	104.2	104.2	189.1	152.2	149.6	149.9	
Pittsburgh, Pa.	198.8	199.7	214.8	214.8	121.8	121.8	138.2	138.2	103.4	103.4	188.3	188.0	149.6	149.9	
Portland, Maine	186.7	187.3	(1)	(1)	(1)	(1)	149.8	151.4	105.7	105.8	(1)	(1)	(1)	(1)	
Portland, Ore.	211.8	210.4	(1)	183.8	(9)	128.9	132.3	131.8	92.9	92.0	(1)	178.3	(1)	159.9	
Richmond, Va.	188.5	188.3	(1)	(1)	185.0	(9)	115.1	149.7	149.6	109.4	109.4	(1)	195.3	(1)	145.7
St. Louis, Mo.	202.9	204.6	(1)	(1)	(1)	(1)	140.1	140.0	88.4	88.4	(1)	(1)	(1)	(1)	
San Francisco, Calif.	212.2	214.3	(1)	(1)	(1)	(1)	84.5	84.5	74.4	74.4	(1)	(1)	(1)	(1)	
Savannah, Ga.	197.1	197.0	(1)	184.6	(9)	118.5	152.2	152.2	108.6	108.6	(1)	192.2	(1)	158.5	
Seranton, Pa.	191.0	192.4	194.4	(1)	112.3	(9)	147.1	147.1	98.3	98.3	167.7	(1)	143.8	(1)	
Seattle, Wash.	205.6	205.8	182.5	(1)	126.2	(9)	128.3	128.3	91.7	91.7	187.2	(1)	161.8	(1)	
Washington, D. C.	193.6	194.4	210.2	(1)	106.6	(9)	143.0	143.0	104.3	104.3	196.8	(1)	156.9	(1)	

¹ Prices of apparel, housefurnishings, and miscellaneous goods and services are obtained monthly in 10 cities and once every 3 months in 24 additional cities according to a staggered schedule.

² Rents are surveyed every 3 months in 34 large cities according to a staggered schedule.

TABLE D-4: Indexes of Retail Prices of Foods,¹ by Group, for Selected Periods

[1935-39=100]

Year and month	All foods	Cereals and bakery products	Meats, poultry, and fish	Meats				Chickens	Fish	Dairy products	Eggs	Fruits and vegetables				Beverages	Fats and oils	Sugar and sweets		
				Total	Beef and veal	Pork	Lamb					Total	Fresh	Canned	Dried					
1923: Average	124.0	105.5	101.2									129.4	136.1	106.5	175.6	124.8	175.4	131.5	126.2	175.4
1926: Average	137.4	115.7	117.6									127.4	141.7	210.8	226.2	122.9	152.4	170.4	145.0	120.0
1929: Average	122.5	107.6	127.1									131.0	143.8	166.0	173.5	124.3	171.0	164.8	127.2	114.3
1932: Average	86.5	82.6	79.3									84.9	92.3	103.5	105.9	91.1	91.2	112.6	71.1	89.6
1939: Average	95.2	94.5	96.6	96.5	101.1	88.9	99.5	93.8	101.0	96.9	91.0	94.5	95.1	92.3	93.3	95.5	87.7	100.6		
August	93.5	92.4	95.7	95.4	98.6	88.0	98.8	94.6	99.6	93.1	90.7	92.4	92.8	91.6	90.3	94.9	84.5	94.6		
1940: Average	96.6	95.8	94.4	102.8	81.1	99.7	94.8	110.6	101.4	93.8	96.5	97.3	92.4	100.6	92.5	82.2	95.8			
1941: Average	105.8	97.9	107.5	106.5	110.8	100.1	106.6	102.1	124.5	112.0	112.2	103.2	104.2	97.9	106.7	101.5	94.0	106.4		
December	113.1	102.8	111.1	114.4	103.2	108.1	100.5	138.9	120.5	138.1	110.5	111.0	106.3	118.3	114.1	108.5	114.4			
1942: Average	123.9	105.1	126.0	122.5	123.6	120.4	124.1	122.6	136.5	130.8	132.8	121.6	126.3	122.1	119.6	126.5				
1943: Average	138.0	107.6	133.8	134.2	124.7	119.9	138.9	146.1	206.5	134.6	161.9	168.8	178.0	130.6	168.9	124.8	138.1	127.1		
1944: Average	136.1	108.4	120.9	117.9	118.7	124.2	134.5	151.0	207.6	133.8	153.9	168.2	177.2	129.5	164.5	124.3	123.3	126.8		
1945: Average	139.1	109.0	131.2	118.4	112.8	136.0	154.4	217.1	133.9	164.4	177.1	185.2	132.0	169.2	124.7	124.0	126.8			
August	140.9	109.1	131.8	118.1	118.5	112.8	136.4	157.3	217.8	133.4	171.4	193.5	198.3	130.3	168.6	124.7	124.0	126.6		
1946: Average	159.6	125.0	161.3	150.8	150.5	148.2	163.9	174.0	236.2	165.1	168.8	182.4	190.7	140.8	190.4	139.6	152.1	143.9		
June	145.6	122.1	154.0	120.4	121.2	114.3	139.0	162.8	219.7	147.8	147.1	183.5	196.7	127.5	172.5	125.1	126.4	136.2		
November	187.7	140.6	203.6	197.9	191.0	207.1	205.4	188.9	265.0	198.5	201.6	184.5	182.3	167.7	201.6	167.8	244.4	170.8		
1947: Average	193.8	155.4	217.1	214.7	213.6	215.9	220.1	183.2	271.4	186.2	200.8	199.4	201.8	166.2	203.5	186.8	197.0	180.0		
1948: Average	210.2	170.9	246.5	243.9	258.5	222.5	246.8	203.2	312.8	204.8	208.7	205.2	212.4	158.0	246.8	205.0	195.5	174.0		
1949: Average	201.9	160.7	223.4	229.3	241.3	205.9	251.7	191.5	314.1	186.7	201.2	208.1	218.8	152.9	227.4	220.7	148.4	176.4		
February	199.7	170.0	221.4	212.3	220.5	196.3	228.4	199.0	327.2	192.5	179.6	213.7	224.9	158.6	224.6	209.0	150.8	174.3		
March	201.6	170.1	226.6	222.5	230.3	206.4	240.7	198.9	325.9	190.3	180.1	214.5	226.0	158.0	227.9	208.5	155.1	175.6		
April	202.8	170.3	234.4	226.5	233.3	209.8	271.0	201.2	321.3	184.9	183.8	218.6	231.5	157.1	228.3	208.2	149.8	176.2		
May	202.4	170.1	223.2	220.0	235.2	203.9	275.5	190.5	315.4	182.6	190.9	220.7	234.6	156.3	227.5	207.2	144.4	176.1		
June	204.3	169.2	240.6	229.3	247.8	216.0	278.4	184.4	312.6	182.0	198.0	217.9	231.1	155.3	227.3	207.6	142.9	176.5		
July	201.7	169.5	236.0	234.4	245.3	209.8	265.5	182.8	307.7	182.2	204.1	210.2	221.2	154.2	228.1	208.2	141.0	176.2		
August	202.6	169.4	239.5	237.3	246.3	221.9	247.8	191.5	308.9	184.9	222.2	201.9	211.4	149.7	229.6	208.8	144.0	176.5		
September	204.2	160.7	243.6	242.0	249.9	227.6	254.7	192.5	211.9	185.3	232.6	199.8	206.0	148.0	230.1	211.0	148.3	176.8		
October	200.6	169.1	231.1	233.1	248.2	207.7	246.1	184.6	306.8	186.7	227.8	194.5	202.3	147.0	228.5	213.8	144.5	177.5		
November	200.8	169.2	229.1	226.4	248.5	189.7	242.0	184.5	300.6	186.4	207.8	202.0	212.7	146.2	224.7	205.3	139.7	178.9		
December	197.3	169.2	223.2	220.0	245.2	178.3	238.1	179.5	209.0	186.2	178.0	198.2	208.6	145.1	224.3	202.5	136.7	178.8		
1950: January	196.0	169.0	219.4	217.9	242.3	177.3	234.3	158.9	201.9	184.2	152.3	204.8	217.2	143.3	223.9	209.5	135.2	178.0		
February	194.8	169.0	221.6	220.5	241.9	184.0	238.6	165.1	208.7	183.6	141.1	199.1	210.0	142.6	222.4	204.5	133.5	178.0		

¹ The Bureau of Labor Statistics retail food prices are obtained monthly during the first three days of the week containing the fifteenth of the month, through voluntary reports from chain and independent retail food dealers. Articles included are selected to represent food sales to moderate-income families.

The indexes, based on the retail prices of 50 foods, are computed by the fixed-base-weighted-aggregate method, using weights representing (1) relative importance of chain and independent store sales, in computing city average prices; (2) food purchases by families of wage earners and moderate-

income workers, in computing city indexes; and (3) population weights, in combining city aggregates in order to derive average prices and indexes for all cities combined.

Indexes of retail food prices in 56 large cities, combined, by commodity groups, for the years 1923 through 1948 (1935-39=100), may be found in Bulletin No. 965, "Retail Prices of Food, 1948," Bureau of Labor Statistics, U. S. Department of Labor, table 3, p. 7. Mimeographed tables of the same data, by month, January 1935 to date, are available upon request.

TABLE D-5: Indexes of Retail Prices of Foods, by City

[1935-39=100]

City	Feb. 1950	Jan. 1950	Dec. 1949	Nov. 1949	Oct. 1949	Sept. 1949	Aug. 1949	July 1949	June 1949	May 1949	Apr. 1949	Mar. 1949	Feb. 1949	June 1946	Aug. 1939	
United States	194.8	196.0	197.3	200.8	200.6	204.2	202.6	201.7	204.3	202.4	202.8	201.6	199.7	145.6	95.8	
Atlanta, Ga.	190.0	192.5	194.7	197.7	199.9	206.9	203.9	198.3	200.5	197.0	197.5	198.3	194.7	141.0	92.5	
Baltimore, Md.	205.6	206.8	208.1	211.9	211.8	216.4	215.4	211.5	216.2	213.0	212.4	212.9	210.3	152.4	94.7	
Birmingham, Ala.	184.5	186.4	190.5	197.2	197.2	201.9	199.8	198.6	201.4	198.5	198.3	197.4	195.8	147.7	90.7	
Boston, Mass.	184.8	186.5	189.5	193.2	193.7	197.1	194.6	194.2	195.9	192.4	191.3	190.9	187.8	138.0	93.5	
Bridgeport, Conn.	192.5	195.5	197.0	200.3	198.2	204.8	201.1	200.3	205.0	201.7	198.8	197.9	194.9	139.1	95.2	
Buffalo, N. Y.	180.6	189.8	189.3	193.2	198.1	198.2	199.5	200.2	199.6	198.9	195.5	195.0	191.4	140.3	94.5	
Butte, Mont.	194.8	194.1	194.1	199.5	200.2	201.4	200.8	202.1	206.7	202.6	204.6	201.3	201.8	139.7	94.1	
Cedar Rapids, Iowa	201.0	200.3	203.4	201.2	205.2	203.9	205.1	211.2	208.1	209.0	207.8	206.8	148.2	136.2	95.2	
Charleston, S. C.	183.3	185.3	187.9	189.2	190.5	193.0	193.9	190.3	195.4	191.3	195.2	193.8	190.8	140.8	98.1	
Chicago, Ill.	198.6	199.9	202.2	208.3	206.5	212.1	209.2	211.6	207.0	208.5	205.9	202.7	142.8	132.8	95.2	
Cincinnati, Ohio	196.8	197.4	197.3	198.7	197.6	203.4	201.6	200.5	204.2	200.3	203.2	201.9	199.7	141.4	90.4	
Cleveland, Ohio	201.8	202.6	202.2	206.0	209.2	211.1	210.4	208.9	211.2	208.1	209.2	210.2	149.3	93.6	95.2	
Columbus, Ohio	177.7	177.2	179.3	180.8	183.6	187.9	186.2	182.9	185.4	184.3	185.6	184.3	182.3	136.4	88.1	
Dallas, Tex.	197.6	198.4	201.9	205.0	204.8	207.0	205.3	204.8	204.9	204.4	204.4	202.0	200.7	142.4	91.7	
Denver, Colo.	196.2	196.8	200.2	196.0	200.2	199.1	204.5	208.2	206.6	208.1	207.0	204.5	145.3	92.7	95.2	
Detroit, Mich.	190.4	191.8	193.4	195.5	192.4	197.4	197.2	197.9	201.5	200.0	197.0	195.1	194.5	145.4	90.6	
Fall River, Mass.	190.7	191.9	193.8	198.1	198.7	201.7	201.2	199.3	201.1	197.0	199.4	199.6	195.3	138.1	95.4	
Houston, Tex.	205.6	207.7	210.5	212.7	212.4	212.2	211.6	211.0	218.1	211.3	212.6	209.6	208.0	144.0	97.8	
Indianapolis, Ind.	191.2	192.3	194.5	196.9	198.9	200.5	199.3	198.7	200.5	197.3	196.7	197.9	195.5	141.5	90.7	
Jackson, Miss. ¹	196.1	199.9	204.5	206.5	204.4	206.0	205.5	207.8	205.5	204.7	203.1	203.7	205.4	150.6	95.2	
Jacksonville, Fla.	198.7	200.7	202.8	206.9	205.9	208.5	206.0	207.0	208.3	205.6	206.6	206.6	201.2	150.8	95.8	
Kansas City, Mo.	182.7	183.6	184.5	186.9	186.0	190.7	187.2	188.5	190.8	189.0	189.8	189.8	189.2	134.8	91.5	
Knoxville, Tenn.	216.1	216.7	220.0	223.3	223.6	227.3	225.5	222.3	226.0	223.5	220.5	222.1	221.3	165.6	95.7	
Little Rock, Ark.	194.5	196.4	197.0	198.8	198.2	201.4	201.6	198.6	204.2	201.9	201.2	198.0	197.2	139.1	94.0	
Los Angeles, Calif.	198.3	201.4	197.2	200.5	200.8	202.8	201.7	202.3	206.3	206.7	211.2	211.2	210.8	145.8	94.6	
Louisville, Ky.	181.1	183.7	185.0	188.3	189.7	194.3	192.4	194.4	194.1	194.4	197.6	187.7	182.2	135.6	92.1	
Manchester, N. H.	189.9	191.6	192.9	195.5	197.2	203.3	202.1	200.8	205.2	199.4	199.7	199.3	196.4	144.4	94.9	
Memphis, Tenn.	202.2	203.1	206.9	210.2	209.7	213.0	214.3	217.1	215.3	215.6	214.9	211.9	212.2	153.4	95.7	
Milwaukee, Wis.	196.6	196.5	196.1	199.3	199.4	203.7	200.6	201.8	205.6	204.9	206.8	203.2	200.8	144.3	91.1	
Minneapolis, Minn.	188.3	189.7	187.2	192.0	191.1	192.8	190.1	194.3	193.5	193.1	192.4	190.1	137.7	95.0	95.2	
Mobile, Ala.	194.8	196.4	201.3	203.6	204.8	207.0	206.6	203.8	207.9	204.6	203.5	206.9	207.4	146.0	95.5	
Newark, N. J.	190.3	192.4	196.1	198.6	198.2	201.2	198.5	198.5	199.8	198.8	199.7	197.6	196.3	147.9	95.6	
New Haven, Conn.	199.6	199.6	193.1	194.4	197.9	198.3	194.2	194.7	198.5	194.3	194.3	193.6	194.0	143.7	93.7	
New Orleans, La.	206.9	209.6	211.7	212.3	210.0	215.8	214.4	214.0	215.2	210.1	212.4	211.0	210.2	157.6	97.6	
New York, N. Y.	195.3	199.9	198.8	201.5	201.0	205.8	204.1	203.4	202.2	203.7	202.4	200.0	149.2	95.8	95.2	
Norfolk, Va.	195.0	194.8	198.0	200.8	203.5	208.9	206.1	202.0	206.9	204.9	205.2	203.5	202.0	146.0	95.6	
Omaha, Nebr.	189.8	189.9	190.9	194.7	195.7	197.9	196.4	196.2	201.1	196.9	196.4	195.7	195.5	139.5	92.3	
Phoenix, Ill.	206.9	205.9	205.5	210.0	211.9	214.4	214.9	216.6	218.9	212.4	211.1	210.8	207.9	151.3	93.4	
Philadelphia, Pa.	180.5	191.3	193.5	198.8	197.9	199.9	198.3	198.3	198.7	198.1	197.9	196.7	195.0	143.5	93.0	
Pittsburgh, Pa.	198.8	199.7	200.8	205.4	204.8	208.0	207.9	208.3	208.8	206.1	206.1	204.6	202.2	147.1	92.5	
Portland, Maine	186.7	187.3	187.2	188.4	189.7	193.8	194.8	194.7	197.2	191.1	190.0	191.5	189.7	138.4	95.9	
Portland, Oreg.	211.8	210.4	206.3	207.8	209.7	211.1	211.6	213.6	219.4	218.8	221.6	222.5	220.4	158.4	96.1	
Providence, R. I.	197.4	198.3	201.3	205.2	207.0	210.9	209.0	209.7	208.9	206.5	206.8	206.4	202.9	144.9	93.7	
Richmond, Va.	188.5	188.3	191.3	193.5	195.0	197.4	202.4	200.7	195.8	197.5	195.0	195.5	197.1	193.5	138.4	92.2
Rochester, N. Y.	190.0	190.7	192.0	193.5	193.7	198.1	198.6	197.5	199.3	198.3	194.3	193.3	192.1	142.5	92.3	
St. Louis, Mo.	202.9	204.0	206.2	208.6	207.5	211.6	210.6	206.8	212.8	207.8	207.5	207.6	207.1	147.4	93.8	
St. Paul, Minn.	186.8	186.0	187.9	187.5	190.3	188.8	189.1	192.3	191.8	190.4	190.4	188.9	187.3	144.3	94.3	
Salt Lake City, Utah	199.4	198.7	196.6	202.0	202.6	203.1	201.0	204.9	207.5	206.6	207.3	207.4	215.1	174.6	94.6	
San Francisco, Calif.	212.2	214.3	210.1	212.9	213.1	213.7	209.9	212.6	215.5	222.1	216.3	219.3	215.5	155.5	93.8	
Savannah, Ga.	197.1	197.0	201.8	207.1	208.2	218.3	212.5	210.2	217.1	213.2	212.2	212.4	206.5	158.5	96.7	
Scranton, Pa.	191.0	192.4	193.2	198.1	200.9	206.3	206.1	202.7	204.1	202.6	202.2	201.1	196.0	144.0	92.1	
Seattle, Wash.	208.6	205.8	203.1	207.4	205.0	208.0	205.5	205.8	209.3	212.8	213.5	213.6	215.1	146.4	94.5	
Springfield, Ill.	201.4	200.9	201.6	204.4	204.7	209.6	210.1	208.4	214.0	207.8	206.0	207.5	206.0	150.1	94.1	
Washington, D. C.	193.6	194.4	196.1	202.6	200.1	203.8	203.5	200.4	202.2	201.2	200.1	198.8	195.2	145.5	94.1	
Wichita, Kans.	205.1	205.9	207.8	210.9	211.2	211.8	211.9	210.7	216.4	214.0	215.3	215.1	213.0	154.4	94.1	
Winston-Salem, N. C.	188.6	191.0	196.3	197.8	197.5	200.6	200.6	198.9	200.6	197.8	196.3	197.8	195.6	145.3	95.2	

¹ June 1940=100.² Estimated index based on half the usual sample of reports. Remaining reports lost in the mulls. Index for December 15, reflects the correct level of food prices for New Haven.

TABLE D-6: Average Retail Prices and Indexes of Selected Foods

Commodity	Average Price Feb. 1950	Indexes 1935-39=100														
		Feb. 1950	Jan. 1950	Dec. 1949	Nov. 1949	Oct. 1949	Sept. 1949	Aug. 1949	July 1949	June 1949	May 1949	Apr. 1949	Mar. 1949	Feb. 1949	Aug. 1939	
Cereals and bakery products:																
Cereals:	Cents															
Flour, wheat.....	5 pounds	48.4	187.7	187.3	186.6	186.3	184.8	184.2	183.6	183.9	184.9	186.3	186.0	186.8	186.4	82.1
Corn flakes.....	11 ounces	16.7	177.3	177.8	177.9	177.7	177.8	178.0	178.7	178.7	178.6	178.2	178.0	177.8	177.6	92.7
Corn meal.....	pound	8.4	178.5	177.7	178.2	178.9	182.4	182.4	181.7	181.7	184.6	184.7	185.1	186.4	186.6	90.7
Rice.....	do	16.4	92.4	92.2	93.5	94.1	98.4	100.3	106.1	104.9	104.6	105.6	107.5	107.3	107.4	(9)
Rolled oats.....	20 ounces	16.1	146.2	146.4	146.7	147.4	148.0	148.1	148.4	149.0	149.2	149.3	150.0	151.8	152.2	(9)
Bakery products:																
Bread, white.....	pound	14.0	163.9	163.8	164.0	164.1	164.2	164.1	164.2	164.3	163.8	164.0	163.5	163.3	163.2	83.2
Vanilla cookies.....	do	44.4	190.0	189.0	190.6	190.4	193.2	191.3	190.8	190.0	194.0	194.5	194.4	194.3	194.3	(9)
Meats, poultry, and fish:																
Meats:																
Beef:																
Round steak.....	do	84.2	249.2	232.1	237.5	262.2	260.8	266.2	264.7	263.1	264.6	246.8	240.7	234.5	218.5	102.7
Rib roast.....	do	68.2	237.0	238.5	242.1	244.2	243.7	241.7	237.8	237.0	229.6	228.2	226.5	224.1	213.8	97.4
Chuck roast.....	do	55.1	245.7	245.1	254.0	260.3	261.3	253.8	248.1	245.6	252.0	236.6	237.3	235.0	224.3	97.1
Hamburger.....	do	50.9	164.6	164.6	165.7	166.8	166.8	167.2	167.2	168.4	162.7	161.7	161.8	156.8	(9)	
Veal:																
Cutlets.....	do	104.3	261.4	256.8	248.3	260.8	252.1	254.6	252.6	249.7	254.7	248.1	251.5	250.0	251.9	101.1
Pork:																
Chops.....	do	66.4	201.4	186.9	182.7	201.6	228.3	264.0	253.6	254.6	232.4	229.5	229.6	223.5	201.6	90.8
Bacon, sliced.....	do	58.9	154.6	154.7	160.8	170.7	183.9	177.6	173.8	169.4	168.4	165.9	176.8	178.8	179.5	90.9
Ham, whole.....	do	57.4	195.2	192.5	194.2	195.1	208.5	233.0	232.7	222.5	218.6	211.3	221.2	217.2	218.3	92.7
Salt pork.....	do	31.3	149.9	153.2	160.0	181.8	176.1	171.3	169.5	163.1	161.9	161.4	167.5	169.7	171.1	69.0
Lamb:																
Leg.....	do	68.7	242.4	238.1	239.9	245.8	250.1	258.7	251.7	269.7	282.8	279.8	275.3	244.5	232.1	95.7
Poultry:																
Frying chickens: ¹	do	41.5														
New York dressed ²	do	41.5														
Dressed and drawn ³	do	54.0														
Fish:																
Fish (fresh, frozen) ⁴	do	(9)	265.1	272.2	267.1	266.4	268.4	260.1	254.4	251.1	252.2	254.5	261.4	266.8	267.2	98.8
Salmon, pink ⁵	16-ounce can	45.3	345.6	355.9	367.9	385.7	428.8	434.1	439.0	454.4	458.4	460.7	462.7	466.3	97.4	
Dairy products:																
Butter.....	pound	73.3	201.5	201.1	201.9	201.3	200.4	198.1	195.8	192.9	193.2	194.6	197.0	201.8	203.6	84.0
Cheese.....	do	52.1	220.7	231.1	232.2	232.4	232.2	230.2	228.6	226.8	226.4	226.5	227.5	230.9	234.0	92.3
Milk, fresh (delivered).....	quart	20.5	166.9	167.9	171.1	171.3	172.3	169.8	169.8	168.4	167.9	168.4	170.1	176.2	177.5	97.1
Milk, fresh (grocery).....	do	19.1	169.7	170.2	174.2	174.2	175.6	174.1	174.6	172.2	171.6	171.6	174.4	176.8	182.4	96.3
Milk, evaporated.....	14½-ounce can	12.5	174.8	175.1	175.7	178.1	176.3	177.3	177.5	179.2	180.5	181.9	186.5	192.5	200.2	93.9
Eggs: Eggs, fresh.....	dozen	45.8	141.1	152.3	178.0	207.8	227.8	232.6	222.2	204.1	198.0	190.9	183.8	180.1	179.6	90.7
Fruits and vegetables:																
Fresh fruits:																
Apples.....	pound	9.8	187.7	178.6	174.9	165.8	160.0	184.7	192.1	194.1	300.9	311.4	306.2	289.8	275.5	81.6
Bananas.....	do	16.5	278.3	273.1	273.9	277.3	271.4	275.0	280.7	284.3	274.1	272.8	275.2	272.7	97.3	
Oranges, size 200.....	dozen	49.9	176.3	156.5	146.8	167.3	195.3	183.4	200.1	215.5	209.0	194.2	173.2	175.8	165.7	96.9
Fresh vegetables:																
Beans, green.....	pound	23.9	219.2	274.9	245.9	198.1	137.4	164.6	154.1	168.5	175.0	180.8	209.4	194.3	222.0	61.7
Cabbage.....	do	6.4	169.6	173.9	160.4	143.0	147.9	168.1	176.3	164.2	170.0	214.3	197.8	211.9	179.2	103.2
Carrots.....	bunch	20.6	184.3	202.6	208.6	219.9	202.0	197.0	191.3	187.2	188.9	187.4	191.0	184.3	196.1	84.0
Lettuce.....	head	14.1	170.9	220.1	185.3	222.9	196.7	254.7	209.8	156.5	131.8	163.8	243.2	222.8	150.3	97.6
Onions.....	pound	7.6	184.8	216.9	220.9	208.9	191.9	179.3	160.3	186.6	206.2	157.8	155.4	141.9	155.8	88.8
Potatoes.....	15 pounds	70.6	195.6	195.5	195.3	194.1	180.0	208.4	222.0	233.8	259.7	271.6	246.5	237.2	237.9	91.8
Spinach.....	pound	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	
Sweetpotatoes.....	do	10.7	205.5	205.6	196.8	182.6	183.0	206.1	270.8	322.6	330.4	312.4	298.5	294.2	220.9	115.7
Tomatoes.....	do	23.9	187.4	165.3	175.4	168.5	180.8	100.0	(9)	(9)	(9)	(9)	(9)	(9)	(9)	
Canned fruits:																
Feches.....	No. 2 ½ can	27.0	140.1	141.8	148.2	149.8	152.4	153.1	155.1	155.3	157.7	155.7	155.9	158.8	159.4	88.6
Pineapple.....	do	37.7	173.6	174.2	175.2	177.0	179.4	180.9	183.0	183.7	182.5	182.2	182.5	182.5	182.6	96.0
Canned vegetables:																
Corn.....	No. 2 can	17.6	142.1	144.1	149.8	152.4	153.1	155.1	155.3	157.7	155.7	155.9	158.8	159.8	159.4	88.6
Peas.....	do	14.9	114.0	113.1	112.5	112.6	112.8	112.9	113.5	113.8	113.8	113.8	115.0	115.3	117.0	88.8
Tomatoes.....	do	14.2	157.7	158.2	157.8	158.4	158.4	158.8	161.4	171.8	174.5	175.2	175.4	177.1	178.3	92.5
Dried fruits: Prunes.....	pound	23.6	231.7	232.5	231.8	230.7	232.0	231.3	230.2	230.3	228.9	228.9	228.9	228.9	228.9	94.7
Dried vegetables: Navy beans.....	do	15.0	204.3	206.9	209.0	211.2	219.2	224.4	224.7	225.1	225.9	227.7	227.4	230.0	226.4	93.0
Beverages: Coffee.....	do	76.4	303.9	298.9	291.9	264.8	213.4	210.6	208.4	207.8	207.2	207.8	208.1	208.6	93.3	
Fats and oils:																
Lard.....	do	16.4	110.0	113.1	114.2	119.3	130.4	133.9	129.4	120.1	121.4	121.2	125.0	131.2	133.2	65.2
Hydrogenated veg. shortening ⁶	do	30.3	146.3	148.8	154.3	158.5	159.1	159.3	158.9	163.7	165.4	167.1	174.9	176.9	187.1	93.9
Salad dressing.....	pint	33.4	138.0	138.3	138.6	139.3	140.9	142.6	139.3	140.2	143.0	145.0	149.2	151.0	156.1	(9)
Margarine.....	pound	28.1	154.4	155.3	156.1	157.9	161.0	171.8	163.0	157.7	159.0	161.3	170.5	181.9	186.7	93.6
Sugar and sweets:																
Sugar.....	5 pounds	48.0	178.8	179.8	179.7	179.8	178.4	177.7	177.4	177.1	177.4	176.0	177.1	176.5	175.1	95.6

¹ July 1947=100.² Index not computed.³ February 1949=100.⁴ Not priced in earlier period.⁵ New specifications introduced in April 1949, in place of roasting chickens.⁶ Priced in 29 cities.⁷ Priced in 27 cities.⁸ 1935-39=100.⁹ Average price not computed.¹⁰ Discontinued October 1949.¹¹ October 1949=100.¹² First inclusion in Retail Food Price Index.¹³ Formerly published as shortening in other containers.

TABLE D-7: Indexes of Wholesale Prices,¹ by Group of Commodities, for Selected Periods

[1929=100]

Year and month	All commodities ²	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products ³	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous commodities	Raw materials	Semi-manufactured articles	Manufactured products ⁴	All commodities except farm products ⁵	All commodities except farm products and foods ⁶
1913: Average	60.8	71.5	64.2	68.1	87.3	61.3	90.8	56.7	80.2	56.1	93.1	68.8	74.9	69.4	69.0	70.0
1914: July	67.3	71.4	62.9	66.7	85.7	79.1	52.9	77.9	56.7	88.1	87.8	87.5	85.9	85.7	85.7	85.7
1914: November	136.3	150.3	128.6	131.6	142.6	114.3	143.5	101.8	178.0	99.2	142.3	138.3	182.7	130.4	131.0	129.9
1920: May	167.2	169.8	147.3	193.2	188.3	158.8	155.5	164.4	173.7	143.3	176.5	163.4	233.0	157.8	165.4	170.6
1925: Average	95.3	104.9	90.9	106.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	97.5	93.9	94.5	93.3	91.6
1932: Average	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	55.1	59.3	70.3	68.3	70.2
1939: Average	77.7	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	74.5	70.2	77.0	80.4	79.5	81.8	
1939: August	75.0	61.0	67.2	92.7	67.8	72.6	93.2	86.6	74.2	85.6	73.3	66.5	74.5	70.1	77.9	80.1
1940: Average	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	71.9	79.1	81.6	80.8	83.0
1941: Average	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0	83.5	86.9	89.1	88.3	89.0
1941: December	93.6	94.7	90.5	114.8	91.8	78.4	103.3	107.8	90.4	101.1	87.6	92.3	90.1	94.6	93.3	93.7
1942: Average	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7	100.6	92.6	98.6	97.0	95.5
1943: Average	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2	112.1	92.9	100.1	98.7	96.9
1944: Average	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.8	95.2	104.3	93.6	113.2	94.1	100.8	99.6	98.5
1942: Average	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7	116.8	95.9	101.8	100.8	99.7
1942: August	105.7	126.9	106.4	118.0	99.6	84.8	104.7	117.8	95.3	104.5	94.8	116.3	95.5	101.8	100.9	99.9
1946: Average	121.1	148.9	130.7	137.2	116.3	99.1	115.5	132.6	101.4	111.6	100.3	134.7	110.8	116.1	114.9	109.5
1946: June	112.9	140.1	112.9	122.4	106.2	87.8	112.2	129.9	96.4	110.4	98.8	126.3	105.7	107.3	106.7	105.6
1946: November	139.7	169.8	165.4	172.5	131.6	94.5	130.2	145.5	118.9	118.2	106.5	153.4	129.1	134.7	132.9	120.7
1947: Average	152.1	181.2	165.7	182.4	141.7	105.7	145.0	179.7	127.3	131.1	115.8	165.6	148.6	146.0	145.5	135.2
1948: Average	165.1	188.3	179.1	188.8	149.8	134.2	163.6	199.1	135.7	144.5	120.5	178.4	158.0	159.4	159.8	151.0
1949: Average	155.0	165.6	161.6	180.4	140.4	131.7	170.2	193.3	118.6	145.2	112.3	163.9	150.2	151.2	152.5	147.3
1949: February	159.1	168.3	161.5	182.3	145.2	133.9	175.5	201.5	122.8	148.3	115.3	165.8	154.0	155.7	151.8	
1949: March	158.4	171.5	162.9	180.4	143.8	134.3	174.4	200.0	121.1	148.0	115.7	167.3	156.9	154.1	155.3	150.7
1949: April	156.9	170.5	162.9	179.9	142.2	132.0	171.8	196.5	117.7	147.0	116.6	165.8	153.1	153.0	153.7	149.9
1949: May	155.7	171.2	163.8	179.2	140.5	130.1	168.4	193.9	118.2	146.2	113.5	165.9	149.4	151.5	152.1	146.8
1949: June	154.5	169.8	162.4	178.5	139.2	129.9	167.5	191.4	116.8	145.1	111.0	164.5	146.5	146.7	151.6	
1949: July	153.5	166.2	161.3	177.5	138.0	129.9	167.9	190.0	118.1	143.0	110.3	162.3	146.0	149.7	150.5	145.0
1949: August	152.9	162.3	160.6	178.9	135.1	129.7	168.2	188.2	119.7	142.9	109.8	161.3	147.9	149.4	150.6	145.0
1949: September	153.6	163.1	162.0	181.1	139.0	130.0	168.2	189.4	117.7	142.9	109.6	162.0	147.8	150.1	151.2	145.3
1949: October	152.2	159.6	158.6	181.3	138.0	130.5	167.3	189.2	116.0	143.0	109.0	160.3	145.3	149.1	150.3	145.0
1949: November	151.6	158.6	158.9	180.8	138.0	129.9	167.3	189.6	115.9	143.4	109.7	160.4	145.1	148.1	150.2	145.7
1949: December	151.2	159.9	155.8	179.9	138.4	130.5	167.8	190.4	115.3	144.2	110.7	159.5	144.7	148.0	150.2	145.5
1950: January	151.5	154.7	154.8	179.3	138.5	131.4	168.4	191.6	115.7	144.9	110.0	159.8	144.9	148.2	150.5	145.8
1950: February	152.7	159.1	156.8	179.0	138.2	131.2	168.6	192.7	115.3	145.0	110.0	162.4	144.4	149.1	151.1	145.9

¹ BLS wholesale price data, for the most part, represent prices in primary markets. They are prices charged by manufacturers or producers or are prices prevailing on organized exchanges. The weekly index is calculated from 1-day-a-week prices; the monthly index from an average of these prices. Monthly indexes for the last 2 months are preliminary.

The indexes currently are computed by the fixed base aggregate method, with weights representing quantities produced for sale in 1929-31. (For a detailed description of the method of calculation see "Revised Method of Calculation of the Bureau of Labor Statistics Wholesale Price Index," in the *Journal of the American Statistical Association*, December 1937.)

Mimeographed tables are available, upon request to the Bureau, giving monthly indexes for major groups of commodities since 1930 and for subgroups and economic groups since 1913. The weekly wholesale price indexes are

available in summary form since 1947 for all commodities; all commodities less farm products and foods; farm products; foods; textile products; fuel and lighting materials; metals and metal products; building materials; and chemicals and allied products. Weekly indexes are also available for the subgroups of grains, livestock, and meats.

² Includes current motor vehicle prices beginning with October 1946. The rate of production of motor vehicles in October 1946 exceeded the monthly average rate of civilian production in 1941, and in accordance with the announcement made in September 1946, the Bureau introduced current prices for motor vehicles in the October calculations. During the war, motor vehicles were not produced for general civilian sale and the Bureau carried April 1942 prices forward in each computation through September 1946.

³ Corrected.

TABLE D-8: Indexes of Wholesale Prices,¹ by Group and Subgroup of Commodities

1926=100]

Group and subgroup	1930				1940								1945		1950			
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	June	Aug.			
All commodities ²	152.7	151.5	151.2	151.6	152.2	153.6	152.9	153.5	154.5	155.7	156.9	158.4	158.1	112.9	75.0			
Farm products																		
Grains	159.1	154.7	154.9	156.8	159.6	163.1	162.2	166.8	171.2	170.5	171.5	168.3	140.1	81.0				
Wheat	161.3	160.2	160.9	156.4	155.3	156.4	150.4	154.1	154.9	159.9	163.8	162.6	157.2	151.5	81.5			
Livestock and poultry	179.9	170.7	167.0	169.6	177.7	186.6	185.3	188.5	193.3	191.5	189.0	182.6	187.2	137.4	66.0			
Livestock	200.6	192.0	187.0	188.3	197.6	207.8	206.6	209.4	212.6	207.7	202.4	209.5	201.1	143.4	67.7			
Other farm products	144.9	142.6	145.0	148.2	148.5	149.8	150.1	150.5	156.7	160.8	160.0	158.6	158.9	137.5	60.1			
Eggs ³	87.3	86.0	99.1	132.5	147.5	155.3	146.4	138.7	126.9	125.2	124.4	115.1	112.5	97.3	47.5			
Foods	156.8	154.8	155.8	158.9	159.6	162.0	160.6	161.3	162.4	163.8	162.9	162.9	161.5	112.9	67.2			
Dairy products	147.5	148.8	154.4	154.7	154.6	153.8	152.7	149.2	145.5	149.9	147.2	154.8	150.8	127.5	67.9			
Cereal products	144.8	144.3	144.6	144.6	143.7	142.8	146.1	145.6	145.1	145.8	146.5	146.7	101.7	71.9				
Fruits and vegetables	138.3	134.4	132.5	130.8	129.1	126.9	130.3	145.4	157.5	167.3	158.1	151.7	152.3	100.1	58.5			
Meats, poultry, and fish	201.9	194.3	193.5	198.9	205.0	215.1	210.7	212.2	215.5	215.2	216.0	214.8	205.1	110.1	73.7			
Meats	216.6	208.3	206.5	212.9	219.6	230.4	224.4	227.8	230.3	227.0	224.9	222.4	212.5	116.0	78.1			
Other foods	129.7	131.0	132.6	139.6	137.4	137.8	136.5	130.8	127.8	126.8	127.6	125.6	127.5	98.1	60.3			
Hides and leather products	179.0	179.3	179.9	180.8	181.3	181.1	176.9	177.8	178.8	179.2	179.9	180.4	182.3	122.4	92.7			
Shoes	184.3	184.3	184.3	183.4	183.4	183.8	183.8	184.1	184.0	185.9	187.8	187.8	129.5	100.8				
Hides and skins	188.2	189.0	192.8	199.5	205.6	204.8	194.5	196.0	188.2	183.4	181.8	185.9	121.5	77.2				
Leather	170.6	177.6	178.1	177.0	176.5	175.8	175.7	175.4	177.1	177.4	178.8	178.9	183.9	110.7	84.0			
Other leather products	143.1	143.1	141.1	141.1	141.1	141.1	142.4	144.4	144.6	144.7	145.6	145.4	115.2	97.1				
Textile products	138.2	138.5	138.4	138.0	138.0	139.1	138.1	139.1	140.3	140.5	142.2	143.8	145.2	109.2	67.8			
Clothing	143.1	143.9	144.0	144.2	144.6	144.8	144.8	145.6	146.0	146.4	147.1	147.3	120.3	81.8				
Cotton goods	178.4	178.7	178.4	177.9	176.5	174.8	170.2	167.3	172.6	176.2	180.1	184.8	139.4	65.8				
Hosiery and underwear	98.6	98.5	98.4	98.4	98.4	98.4	98.5	98.5	99.6	100.4	101.2	101.3	75.8	61.5				
Rayon and nylon	30.9	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	40.8	41.8	41.8	30.2	28.5				
Silk	50.1	50.1	49.9	49.5	49.2	49.2	49.2	49.2	50.1	50.1	50.1	50.1	50.1	44.3				
Woolen and worsted	147.2	147.0	146.9	146.0	145.1	145.4	152.6	157.6	159.7	160.9	160.9	162.1	112.7	75.8				
Other textile products	170.3	171.7	171.5	169.0	169.0	171.5	178.8	177.7	179.1	180.9	184.9	186.9	112.3	63.7				
Fuel and lighting materials	131.2	131.4	130.5	130.0	130.5	130.7	129.7	129.0	130.1	132.0	132.0	134.3	135.9	87.8	72.6			
Anthracite	133.3	139.3	139.3	139.3	139.1	138.6	135.9	135.4	134.2	133.7	135.0	137.9	138.0	106.1	72.1			
Bituminous coal	196.3	196.2	194.1	192.2	191.2	190.5	188.8	188.6	188.6	188.0	190.7	195.2	196.9	132.8	96.0			
Coke	223.7	222.2	222.2	222.2	222.1	222.0	222.0	222.0	222.4	222.7	222.8	222.9	222.9	133.5	104.2			
Electricity	(9)	(9)	69.6	70.3	70.1	68.9	68.5	70.0	68.9	68.2	67.9	67.9	68.5	67.2	75.8			
Gas	(9)	85.0	87.2	88.3	87.8	88.9	89.5	90.1	90.1	90.1	92.3	92.8	91.9	70.6	88.7			
Petroleum and products	109.4	109.4	108.5	109.9	109.1	109.7	110.2	110.4	110.7	113.3	113.3	115.9	118.7	84.0	51.7			
Metals and metal products ⁴	168.6	168.4	167.8	167.3	167.2	168.2	167.9	167.5	168.4	171.8	174.4	175.5	112.2	93.2				
Agricultural machinery and equipment	143.2	143.2	143.1	143.3	143.8	144.1	144.2	144.3	144.8	144.3	144.2	144.2	104.5	93.5				
Farm machinery	145.8	145.5	145.9	145.9	146.4	146.5	146.6	146.7	146.7	146.7	146.7	146.7	104.9	94.7				
Iron and steel	168.7	167.3	165.4	163.4	163.3	164.0	163.8	164.2	164.7	165.1	166.2	168.3	169.1	110.1	93.1			
Motor vehicles	175.6	176.5	176.7	176.7	177.0	177.1	177.2	177.2	177.1	175.0	178.0	175.8	135.5	122.8				
Passenger cars	185.7	186.7	186.7	186.7	187.0	187.0	187.0	187.0	187.0	182.3	183.3	182.5	183.2	142.8	95.6			
Trucks	133.1	133.8	134.7	134.9	135.0	135.3	135.7	135.7	140.1	142.0	142.1	142.4	142.4	104.3	77.4			
Nonferrous metals	128.1	128.6	129.2	131.7	131.8	135.7	135.9	132.1	128.8	128.2	128.4	128.4	122.8	99.2	74.6			
Plumbing and heating	148.7	151.7	154.6	154.6	154.6	154.7	154.7	154.7	154.7	154.7	154.8	154.9	155.1	106.0	84.0			
Building materials	192.7	191.6	190.4	189.6	189.2	189.4	188.2	186.0	191.4	193.9	196.5	200.0	201.5	129.9	89.6			
Brick and tile	163.1	163.5	161.9	161.9	161.8	161.5	161.5	160.8	160.8	160.8	162.4	162.4	121.3	90.8				
Cement	134.9	134.8	134.5	134.5	133.0	133.0	133.0	133.0	134.3	134.3	134.3	134.3	102.6	91.8				
Lumber	292.0	287.5	283.2	283.5	281.9	279.7	277.4	277.4	280.7	285.2	290.6	294.7	296.9	176.0	90.1			
Paint and paint materials	138.6	139.0	139.3	139.9	141.1	143.9	143.8	145.2	152.6	157.9	162.3	165.3	168.6	82.1				
Prepared paint	138.5	138.5	138.5	138.5	138.5	138.5	138.5	138.5	138.5	151.3	151.3	151.3	151.3	90.3				
Paint materials	141.4	142.2	142.9	144.1	146.7	152.5	152.3	153.5	153.5	159.0	161.7	161.7	177.4	183.8	120.9	71.8		
Plumbing and heating	148.7	151.7	154.6	154.6	154.6	154.7	154.7	154.7	154.7	154.7	154.8	154.9	155.1	106.0	79.3			
Structural steel	191.6	191.6	185.2	178.8	178.8	178.8	178.8	178.8	178.8	178.8	178.8	178.8	178.8	120.1	107.3			
Other building materials	171.1	170.5	169.2	168.6	168.1	168.9	167.3	168.8	168.8	170.5	173.8	173.3	170.1	118.4	89.5			
Chemicals and allied products	115.3	115.7	115.3	115.9	116.0	117.7	119.7	118.1	118.6	118.2	117.7	121.1	122.8	96.4	74.2			
Chemicals	114.7	114.7	114.6	115.2	115.8	117.4	118.0	118.1	118.0	119.9	117.2	118.4	119.5	98.0	83.8			
Drug and pharmaceutical materials	121.4	121.5	121.6	123.0	123.1	125.0	125.0	124.7	124.2	123.6	123.0	124.4	148.9	109.4	77.1			
Fertilizer materials	116.9	117.4	117.9	118.3	120.2	120.4	121.8	120.7	117.5	118.9	119.7	119.7	119.6	120.8	82.7	65.8		
Mixed fertilizers	104.6	104.9	104.8	107.0	107.0	107.9	107.9	107.9	108.3	108.3	108.3	108.3	108.3	86.6	73.1			
Oils and fats	120.9	122.7	118.2	118.3	115.6	118.4	130.3	118.5	118.5	127.0	121.2	129.3	131.7	102.1	40.6			
Housefurnishing goods	145.0	144.9	144.2	143.4	143.0	142.9	142.9	143.0	145.1	146.2	147.0	148.0	148.3	110.4	85.6			
Furnishings	151.8	151.8	151.2	149.9	149.2	149.1	149.1	149.1	149.1	150.9	151.9	152.4	152.4	114.5	90.0			
Furniture	138.1	137.8	137.0	136.8	136.7	136.6	136.6	136.6	136.8	139.3	140.3	141.0	142.1	142.8	105.5	81.1		
Miscellaneous	110.0	110.7	109.7	109.6	109.8	110.2	110.2	111.0	113.5	115.6	115.7	115.7	115.3	98.5	73.3			
Tires and tubes	64.3	64.3	64.3	62.5	60.7	60.6	60.6	60.6	62.1	64.6	64.6	64.6	64.6	65.7	55.8			
Cattle feed	177.3	179.3	192.3	184.9	182.1	190.3	197.9	204.7	190.3	213.8	231.9	206.6	190.4	197.8	68.4			
Paper and pulp	155.6	155.9	156.0	156.5	156.5	156.5	156.8	156.8	156.8	163.2	165.1	167.2	168.0	114.6	90.0			
Paper	147.3	147.3	147.5	147.1	146.4	146.4	146.2	146.4	146.9	149.3	153.2	155.8	155.8	127.6	114.6	65.2		
Wood pulp	183.8	183.8	183.8	180.7	190.5	190.5	190.5	190.5	190.5	205.4	216.8	219.2	222.7	154.1	90.6			
Rubber, crude	41.1	39.1	37.8	36.4	34.8	37.2	35.6	35.1	34.5	37.4	38.9</td							

E: Work Stoppages

TABLE E-1: Work Stoppages Resulting From Labor-Management Disputes¹

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935-39 (average)	2,862		1,130,000		16,900,000	0.27
1945	4,750		3,470,000		38,000,000	.47
1946	4,985		4,600,000		116,000,000	1.43
1947	3,693		2,170,000		34,600,000	.41
1948	3,419		1,960,000		34,100,000	.37
1949	3,606		3,030,000		50,500,000	.59
February	239	369	77,500	106,000	675,000	.10
March	289	436	480,000	520,000	3,460,000	.45
April	360	531	160,000	208,000	1,880,000	.27
May	449	678	231,000	309,000	3,430,000	.49
June	377	602	572,000	673,000	4,350,000	.51
July	343	603	110,000	199,000	2,350,000	.35
August	365	643	134,000	237,000	2,140,000	.27
September	287	536	507,000	603,000	6,270,000	.57
October	256	475	570,000	977,000	17,500,000	2.49
November	197	388	56,000	914,000	6,270,000	.63
December	170	323	45,500	417,000	1,350,000	.19
1950: January ²	228 ³	340	185,000	200,000	2,000,000	.38
February ²	210	325	75,000	515,000	7,850,000	1.27

¹ All known work stoppages, arising out of labor-management disputes, involving six or more workers and continuing as long as a full day or shift are included in reports of the Bureau of Labor Statistics. Figures on "workers involved" and "man-days idle" cover all workers made idle for one or

more shifts in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

² Preliminary estimates.

F: Building and Construction

TABLE F-1: Expenditures for New Construction¹

[Value of work put in place]

Type of construction	Expenditures (in millions)													1940	1948
	1930			1940											
	Mar. ²	Feb. ³	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Total	Total
Total new construction ⁴	\$1,500	\$1,305	\$1,496	\$1,612	\$1,767	\$1,879	\$1,922	\$1,903	\$1,833	\$1,735	\$1,576	\$1,370	\$1,267	\$19,329	\$18,775
Private construction	1,125	1,068	1,139	1,225	1,295	1,343	1,368	1,343	1,301	1,229	1,108	989	951	14,059	14,563
Residential building (nonfarm)	620	590	650	690	715	715	675	650	600	530	445	420	7,025	7,223	
Nonresidential building (nonfarm) ⁵	243	246	232	281	266	261	293	264	269	268	257	251	262	3,178	3,578
Industrial	69	70	69	68	68	68	70	71	72	76	82	89	96	974	1,397
Commercial	74	75	77	84	86	82	83	85	91	92	83	76	79	1,001	1,224
Warehouses, office and loft buildings	22	25	26	26	25	22	22	24	24	24	23	23	25	294	323
Stores, restaurants, and garages	52	50	51	58	61	60	61	61	67	68	60	53	54	707	901
Other nonresidential building	100	101	106	109	112	111	110	108	108	100	92	86	87	1,203	1,687
Religious	27	28	29	30	32	31	31	31	30	28	26	26	24	338	326
Educational	19	20	22	23	23	23	22	22	21	20	19	19	20	255	239
Social and recreational	16	17	19	19	20	21	22	22	22	22	20	19	19	211	211
Hospital and institutional ⁶	25	24	23	24	23	22	21	19	17	15	14	12	11	149	116
Remaining types ⁷	13	12	13	13	14	14	14	14	15	15	13	13	13	165	155
Farm construction	19	12	11	15	22	50	65	75	69	40	30	30	18	450	500
Public utilities	243	230	229	259	289	317	320	329	322	311	261	263	251	3,406	3,262
Railroad	25	23	25	31	24	35	36	37	36	34	31	27	389	379	
Telephone and telegraph	46	41	40	42	43	45	47	47	48	52	51	52	57	575	713
Other public utilities	172	156	161	186	212	237	247	246	237	223	196	180	167	2,442	2,170
Public construction	375	327	357	387	472	536	554	560	532	506	468	381	316	5,270	4,212
Residential building	24	20	26	22	24	27	27	23	20	17	15	14	10	215	85
Nonresidential building (other than military or naval facilities) ⁸	151	140	142	142	151	158	155	152	148	144	141	134	122	1,065	1,057
Educational	78	75	77	77	78	80	76	74	72	71	70	65	64	530	567
Hospital and institutional	44	40	40	41	44	47	45	43	40	39	36	34	31	455	210
All other nonresidential	29	25	25	24	29	31	34	35	36	34	35	32	27	360	271
Military and naval facilities	9	9	10	9	12	14	14	12	10	9	9	8	9	120	137
Highways	70	50	70	92	145	185	200	215	200	185	160	100	68	1,670	1,585
Sewer and water	47	44	45	46	50	51	52	51	51	49	46	42	46	570	481
Miscellaneous public service enterprises ⁹	9	7	6	6	8	9	9	8	8	9	9	8	8	95	108
Conservation and development	60	45	48	56	65	74	77	77	75	74	67	56	45	745	897
All other public ¹⁰	15	12	12	14	17	18	20	20	19	18	18	14	12	190	162

¹ Joint estimates of the Bureau of Labor Statistics, U. S. Department of Labor, and the Office of Domestic Commerce, U. S. Department of Commerce. Estimated construction expenditures represent the monetary value of the volume of work accomplished during the given period of time. These figures should be differentiated from permit valuation data reported in the publications for urban building authorized and the data on value of contract awards reported in Table F-2.

² Preliminary.

³ Revised.

⁴ Includes major additions and alterations, except for private residential building which covers new construction only.

⁵ Expenditures by privately owned public utilities for nonresidential buildings are included under "Public utilities."

⁶ Includes Federal contributions toward construction of private nonprofit hospital facilities under the National Hospital Program distributed about as follows: 1949, first quarter, \$1 million; second quarter, \$2 million; third quarter, \$2 million; fourth quarter, \$6 million; January, February, and March, 1950, \$2 million each.

⁷ Hotels and miscellaneous buildings not elsewhere classified.

⁸ Excludes expenditures to construct facilities used in atomic energy projects.

⁹ Covers primarily publicly owned electric light and power systems and local transit facilities.

¹⁰ Covers construction not elsewhere classified such as airports, navigational aids, monuments, etc.

TABLE F-2: Value of Contracts Awarded and Force-Account Work Started on Federally Financed New Construction, by Type of Construction¹

Period	Total new construction ²	Airports ³	Value (in thousands)													
			Building									Conservation and development				
			Nonresidential			Hospital and institutional			Administration and general ⁵		Total	Reclamation	River, harbor, and flood control	Highways	All other ⁴	
			Total	Residential	Total	Total	Educational ⁶	Total	Veterans ⁷	Other						
1938	\$1,533,439	(7)	\$261,394	863,465	\$497,929	(9)	(9)	(9)	(9)	(9)	\$189,710	\$73,797	\$115,913	\$511,685	\$270,650	
1939	1,686,604	\$4,753	606,222	231,071	438,151	(9)	(9)	(9)	(9)	(9)	225,428	115,612	109,811	355,701	331,605	
1942	7,775,497	579,176	6,130,389	549,472	5,580,917	(9)	(9)	(9)	(9)	(9)	217,705	150,708	67,087	347,988	600,142	
1946	1,450,252	14,859	549,655	435,453	114,203	(9)	(9)	(9)	(9)	(9)	300,406	169,253	131,152	535,784	49,588	
1947	1,294,069	24,645	276,514	51,185	225,328	\$47,692	\$101,831	\$91,123	\$5,708	\$31,159	344,046	308,029	77,006	230,934	657,087	
1948	1,690,182	49,718	332,793	8,328	324,465	1,417	246,242	166,018	78,227	28,797	48,009	494,604	147,921	346,683	769,089	43,978
1949	1,725,167	(9)	494,113	29,369	464,744	1,000	307,906	122,201	185,705	86,102	65,646	489,431	188,960	300,471	689,084	52,539
1949: January	87,542	(9)	36,810	87	36,723	148	8,122	359	7,763	24,784	3,669	14,977	7,586	7,381	34,465	1,260
February	94,727	(9)	39,110	1,970	37,140	635	10,023	5,468	4,555	22,615	3,867	23,966	3,079	20,887	28,961	2,660
March	169,357	(9)	35,908	1,773	34,135	0	25,571	9,410	16,161	1,637	6,927	84,332	22,536	61,790	41,619	7,458
April	117,506	(9)	27,034	2,801	24,253	0	18,779	578	18,204	930	4,544	35,541	18,778	16,763	82,057	2,854
May	220,963	(9)	44,061	6,245	37,816	17	18,335	750	17,585	12,607	5,857	88,553	61,857	27,016	83,750	4,599
June	264,597	(9)	98,351	14,730	83,621	0	53,924	14,648	39,276	10,418	19,279	76,240	26,563	51,688	79,100	8,007
July	131,126	(9)	31,277	608	31,119	0	21,065	123	20,942	1,364	8,074	21,032	9,942	15,110	75,435	2,292
August	171,866	(9)	37,616	16	37,600	140	34,095	28,464	8,466	2,456	2,456	32,364	12,341	30,847	7,699	2,088
September	145,498	(9)	56,681	209	56,412	0	52,364	26,269	26,095	534	534	22,138	14,439	7,699	43,035	5,638
October	81,773	(9)	18,850	672	18,178	0	14,212	8,737	5,475	2,392	1,574	12,553	1,091	11,462	49,824	546
November	112,445	(9)	23,181	9	23,172	60	14,724	7,387	7,337	5,306	3,082	42,152	5,602	36,490	38,097	9,015
December	127,743	(9)	44,764	209	44,555	0	35,761	22,983	15,778	1,043	6,751	12,850	8,516	4,334	63,447	6,582
1950: January ⁸	118,217	(9)	42,805	86	42,719	144	27,477	19,328	8,149	12,805	2,203	25,578	17,033	7,045	40,998	8,836
February ¹⁰	105,593	(9)	32,683	123	32,560	138	28,753	17,274	11,479	1,041	2,628	25,256	7,087	18,199	42,357	5,267

¹ Excludes projects classified as "secret" by the military, and all construction for the Atomic Energy Commission. Data for Federal-aid programs cover amounts contributed by both the owner and the Federal Government. Force-account work is done, not through a contractor, but directly by a government agency, using a separate work force to perform nonmaintenance construction on the agency's own properties.

² Includes major additions and alterations.

³ Excludes hangars and other buildings which are included under "Other nonresidential" building construction.

⁴ Includes educational facilities under the Federal temporary re-use educational facilities program.

⁵ Includes post offices, armories, offices, and customhouses. Includes contract awards for construction at United Nations Headquarters at New York City as follows: September 1948, \$497,000; January 1949, \$23,810,000, and January 1950, \$11,238,000.

⁶ Includes electrification projects, water-supply and sewage-disposal systems, forestry projects, railroad construction, and other types of projects not elsewhere classified.

⁷ Included in "All other."

⁸ Unavailable.

⁹ Revised.

¹⁰ Preliminary.

TABLE F-3: Urban Building Authorized, by Principal Class of Construction and by Type of Building¹

Period	Valuation (in thousands)								Number of new dwelling units—House-keeping only					
	Total all classes ²	New residential building								Privately financed				
		Housekeeping				Publicly financed dwelling units	Non-house-keeping ³	New non-residential building	Additions, alterations, and repairs	Privately financed			Pub-licly financed	
		Privately financed dwelling units								Total	1-family	2-family ⁴	Multi-family ⁵	
		Total	1-family	2-family ⁶	Multi-family ⁷									
1942	\$2,707,573	\$598,670	\$478,658	\$42,629	\$77,283	\$296,933	\$22,910	\$1,510,688	\$278,472	184,862	138,908	15,747	30,237	95,946
1946	4,743,414	2,114,833	1,830,260	103,042	181,531	355,587	43,369	1,458,602	771,023	430,195	358,151	24,328	47,718	98,310
1947	5,561,754	2,892,003	2,362,600	156,757	372,646	35,177	29,831	1,712,817	891,926	503,094	393,720	34,165	75,269	5,100
1948	6,971,576	3,422,937	2,745,219	181,403	405,225	139,326	38,034	2,366,730	1,004,549	516,179	392,532	36,306	87,341	15,113
1949 ⁸	7,879,899	3,717,215	2,659,222	132,332	745,661	285,419	39,727	2,400,693	936,845	574,190	412,656	26,415	135,119	32,140
1949: January	409,729	143,359	111,019	9,807	22,733	32,910	1,120	171,911	60,429	23,411	1,919	4,762	3,000	
February	387,181	153,500	118,452	6,507	28,634	23,489	1,626	147,725	60,708	24,839	18,331	1,345	5,163	2,480
March	586,940	272,326	222,811	11,915	37,599	39,602	2,529	192,648	79,836	42,229	32,905	2,381	6,943	4,162
April	635,111	322,063	254,248	13,782	54,636	24,021	6,397	196,181	83,449	50,800	37,538	2,862	10,400	2,738
May	695,644	359,364	254,546	13,446	91,372	30,497	3,084	186,151	86,548	36,563	2,580	15,056	3,110	
June	748,046	356,816	256,544	10,547	89,725	28,782	3,850	250,474	96,124	55,331	36,947	2,131	16,253	3,373
July	596,943	307,631	231,617	8,711	67,303	22,342	3,937	181,367	83,666	48,425	34,324	1,765	12,336	2,791
August	685,894	368,133	278,286	11,004	78,843	12,889	3,074	207,335	92,467	57,051	40,340	2,282	14,429	1,507
September	722,056	401,433	302,265	12,119	87,049	17,825	3,144	215,605	84,049	63,316	43,982	2,316	17,018	2,116
October	678,540	376,556	207,200	13,893	65,463	18,987	3,635	196,076	83,286	57,320	41,794	2,747	12,779	2,254
November	619,910	353,262	202,227	10,626	50,409	18,482	2,692	181,081	64,423	52,357	41,562	2,095	8,700	2,037
December ⁹	559,540	276,820	218,851	9,858	48,131	10,350	4,609	212,214	55,487	43,363	31,349	1,984	10,030	1,287
1950: January ¹⁰	355,653	314,126	243,332	11,335	59,439	7,707	2,421	186,014	65,387	48,852	36,033	2,283	10,536	778

¹ Building for which building permits were issued and Federal contracts awarded in all urban places, including an estimate of building undertaken in some smaller urban places that do not issue permits.

The data cover federally and nonfederally financed building construction combined. Estimates of non-Federal (private and State and local government) non-housing building construction are based primarily on building-permit reports received from places containing about 80 percent of the urban population of the country; estimates of federally financed projects are compiled from notifications of construction contracts awarded, which are obtained from other Federal agencies. Data from building permits are not adjusted to allow for lapsed permits or for lag between permit issuance and the start of construction. Thus, the estimates do not represent construction actually started during the month.

Urban, as defined by the Bureau of the Census, covers all incorporated places of 2,500 population or more in 1940, and, by special rule, a small number of unincorporated civil divisions.

² Covers additions, alterations, and repairs, as well as new residential and nonresidential building.

³ Includes units in 1-family and 2-family structures with stores.

⁴ Includes units in multifamily structures with stores.

⁵ Covers hotels, dormitories, tourist cabins, and other nonhousekeeping residential buildings.

⁶ Preliminary.

⁷ Totals for 1949 include revisions which do not appear in data shown for January through December. Revised monthly data will appear in a subsequent issue of the Monthly Labor Review.

⁸ Revised.

TABLE F-4: New Nonresidential Building Authorized in All Urban Places,¹ by General Type and by Geographic Division²

Geographic division and type of new nonresidential building	Valuation (in thousands)														1949 ³	1948		
	1949																	
	Jan.	Dec. ⁴	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Total				
All types	\$166,014	\$212,214	\$181,081	\$196,076	\$215,605	\$207,335	\$181,367	\$209,474	\$186,151	\$199,181	\$192,648	\$147,725	\$171,911	\$2,400,650	\$2,306,730			
New England	17,361	13,065	6,467	7,178	12,194	10,193	6,683	8,485	15,672	6,026	6,220	4,607	113,834	148,089				
Middle Atlantic	32,172	37,807	35,105	35,337	33,591	37,961	24,466	24,246	26,279	28,448	16,777	47,775	484,807	382,374				
East North Central	23,963	36,623	29,005	50,271	46,910	37,851	38,768	35,841	37,251	48,191	21,264	40,516	501,550	511,794				
West North Central	6,977	15,094	15,327	14,453	34,551	17,996	18,524	18,730	12,255	17,178	18,055	18,335	10,812	203,495	173,152			
South Atlantic	23,129	21,362	24,636	22,993	22,251	19,614	27,279	28,257	31,298	36,645	22,220	39,156	17,951	306,418	269,427			
East South Central	12,582	9,124	11,278	12,154	13,155	15,638	8,279	16,128	8,897	9,621	10,331	8,048	5,394	129,689	100,715			
West South Central	25,529	16,804	18,789	21,130	19,596	20,701	30,554	33,808	14,088	19,910	20,537	21,303	17,950	269,915	274,063			
Mountain	3,078	10,478	13,789	5,344	10,256	7,767	6,847	17,729	7,360	6,647	7,042	3,510	4,840	102,208	83,456			
Pacific	23,078	25,737	26,591	25,670	22,476	27,053	24,351	25,938	34,480	37,557	32,860	23,061	22,135	348,780	412,108			
Industrial buildings ⁵	13,903	14,459	10,895	18,792	17,160	15,617	15,468	17,443	14,188	15,826	15,836	16,855	26,085	302,440	299,286			
New England	8,807	2,004	2,009	2,022	706	352	350	357	625	972	1,019	856	378	6,357	19,839			
Middle Atlantic	3,807	1,804	2,230	5,111	2,201	2,743	5,650	2,281	2,410	4,416	3,478	3,862	4,128	40,367	65,911			
East North Central	4,455	8,442	5,905	4,562	2,755	5,674	3,201	6,950	4,089	5,009	4,012	4,566	16,013	77,037	100,038			
West North Central	709	785	792	956	2,228	1,150	780	1,965	1,123	2,063	1,112	1,746	860	15,689	18,908			
South Atlantic	864	1,149	841	2,529	942	1,389	718	910	1,241	2,475	2,088	2,082	1,173	27,776				
East South Central	436	753	170	180	706	1,145	778	612	570	1,864	644	600	8,736	9,084				
West South Central	1,262	308	406	1,117	249	495	645	705	860	837	857	751	6,828	15,584				
Mountain	135	113	320	242	345	100	142	329	994	493	439	197	551	4,264	2,270			
Pacific	2,451	1,178	1,999	2,094	3,191	2,509	2,704	2,493	3,006	2,177	2,508	1,783	1,405	24,500	42,044			
Commercial buildings ⁶	61,711	82,095	59,305	67,403	73,899	70,047	57,349	65,960	65,863	64,538	61,765	57,357	41,258	751,554	699,551			
New England	2,094	1,849	2,953	5,513	3,041	2,137	3,195	2,956	2,878	2,644	2,617	2,392	2,554	55,560				
Middle Atlantic	22,434	10,388	9,618	9,125	14,596	13,908	7,720	8,333	14,169	14,169	14,169	14,169	14,169	127,035	133,219			
East North Central	7,558	10,119	9,901	16,635	15,951	14,542	11,221	13,037	12,616	11,221	13,037	12,616	13,037	8,205	10,330	147,620		
West North Central	3,183	5,818	5,014	4,170	4,604	4,744	5,279	5,259	4,240	4,945	4,945	4,945	4,945	5,207	7,343	10,106		
South Atlantic	5,411	6,365	8,420	9,201	9,201	9,201	9,201	9,201	9,201	9,201	9,201	9,201	9,201	9,202	10,207	121,552		
East South Central	2,747	2,457	2,795	2,147	1,976	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,251	2,247	3,493	101,126		
West South Central	10,006	5,207	9,399	11,680	11,680	9,022	11,453	9,025	11,453	9,705	9,594	9,777	9,588	10,025	12,054	35,391		
Mountain	1,481	1,214	1,446	1,303	1,303	1,303	1,303	1,303	1,303	1,303	1,303	1,303	1,303	1,304	1,304	15,361		
Pacific	7,105	8,435	9,808	10,148	9,278	9,013	9,529	8,768	14,853	8,124	10,461	12,451	9,007	119,895	145,361			
Community buildings ⁷	86,610	105,260	74,701	73,706	66,681	66,164	83,691	138,531	68,673	71,760	58,270	34,679	46,153	1,005,376	788,601			
New England	14,512	15,222	3,110	586	4,783	5,385	3,129	8,203	3,445	3,171	3,077	487	1,505	42,343	47,255			
Middle Atlantic	570	44,000	44,000	14,109	13,731	15,841	12,336	12,210	15,841	10,260	7,427	12,500	3,717	3,314	176,009	153,423		
East North Central	10,491	15,451	10,110	21,923	16,018	15,428	19,317	30,333	14,273	13,376	23,532	5,322	11,445	200,974	184,846			
West North Central	2,502	4,438	7,201	6,009	23,980	3,828	9,223	9,451	9,176	9,449	8,274	5,531	6,800	100,306	54,207			
South Atlantic	15,135	7,344	6,942	7,464	10,224	7,050	8,783	12,159	9,007	9,177	10,261	3,493	6,006	101,126	80,384			
East South Central	5,892	5,613	6,009	4,116	9,222	10,222	8,771	12,159	11,212	12,159	12,159	8,771	1,159	80,094	8,875			
West South Central	7,461	7,692	8,832	2,940	4,552	3,722	4,350	10,205	2,851	3,768	2,446	1,245	1,610	67,422	36,344			
Mountain	9,137	7,512	6,011	8,461	6,000	11,592	6,860	17,374	12,706	10,706	12,042	9,002	10,099	135,126	100,208			
Pacific	771	16,223	12,790	9,689	3,904	2,761	5,270	12,643	17,111	10,040	6,654	22,843	28,688	150,078	74,414			
Public buildings ⁸	8,968	15,474	11,724	11,424	8,327	10,046	8,508	13,928	10,638	10,638	10,340	10,540	8,571	189,642	148,681			
New England	158	2,040	154	128	18	282	702	55	431	431	131	145	16,010	11,438				
Middle Atlantic	552	264	747	3,851	107	409	620	691	875	453	15	457	24,010	24,668	8,680			
East North Central	268	2,792	331	816	175	534	381	211	1,140	111	17	50	184	8,156	11,352			
West North Central	192	1,571	234	441	178	440	1,105	285	545	74	4,317	0	459	9,532	5,438			
South Atlantic	369	1,748	5,667	1,377	937	638	1,418	808	10,293	2,103	194	22,029	1,159	80,094	8,875			
East South Central	0	18	0	0	0	0	28	1,520	0	0	268	0	32	6,257	8,936			
West South Central	126	146	243	774	229	292	361	1,711	42	75	8	674	8	4,327	3,905			
Mountain	54	709	2,059	28	1,371	5	28	121	58	28	82	276	3	44	3,700			
Pacific	771	8,372	1,249	280	954	2,746	649	7,716	1,077	158	1,514	1,514	1,514	27,207	15,070			
Public works and utility buildings ⁹	8,968	15,474	11,724	11,424	8,327	10,046	8,508	13,928	10,638	10,638	10,340	10,540	8,571	189,642	148,681			
New England	802	3,615	845	2,135	53	702	129	705	705	705	705	705	705	200	277	7,751		
Middle Atlantic	552	544	599	513	319	3,467	1,698	2,743	2,127	274	1,003	1,225	605	39,494	16,651			
East North Central	361	920	2,031	300	1,828	1,839	1,309	1,813	1,158	1,814	2,127	2,127	2,127	2,157	22,303	35,809		
West North Central	1,151	735	229	329	1,994	2,004	442	208	569	745	933	933	933	1,302	11,337	13,015		
South Atlantic	204	4,070	1,108	5,484	1,031	459	1,039	790	645	3,889	535	1,363	2,265	22,706	21,480			
East South Central	638	41	2,326	491	112	0	20	40	24	98	2,875	763	763	7,223	3,700			
West South Central	332	121	126	138	219	164	243	177	838	40	404	0	5	2,566	2,055			
Mountain	2,040	2,765	3,232	586	240	840	2,128	4,960	3,830	4,138	1,164	1,262	823	26,059	31,721			
Pacific	10,241	8,284	11,629	15,061	15,435	12,701	10,903	11,704	14,046	11,614	1,134	5,262	4,739	131,296	159,977			
New England	282	404	768	1,147	1,010	694	657	613	616	761	200	200	200	200	7,751	9,091		
Middle Atlantic	1,187	808	1,438	2,628	2,582	1,592	1,258	1,683	1,591	1,591	1,721	1,589	817	828	18,395	15,490		
East North Central	871	1,809	2,632	4,050	4,655	3,836	2,733	3,420	4,857	5,416	2,665	620	620	51,460	32,430			
West North Central	238	747	1,115	1,647	1,867	1,517	1,027	1,737	2,003	1,027	1,705	2,003	245	13,634	11,661			
South Atlantic	1,146	685	738	689	906	677	1,027	701	601	601	614	607	416	9,254	9,360			
East South Central	333	241	366	349	304	230	271	271	200	200	200	198	198	1,021	4,027	3,240		
West South Central	1,092	957	887	1,703	825	961	670	763	787	787	787	787	787	787	1,021	8,817		
Mountain	327	535	604	703	627	528	520	520	437	437	538	129	129	6,184	4,817			
Pacific	1,704	2,004	2,177	2,253	2,728	2,493	2,146	2,571	2,998	2,244	2,244	1,948	1,947	1,947	27,326	36		

TABLE F-5: Number and Construction Cost of New Permanent Nonfarm Dwelling Units Started, by Urban or Rural Location, and by Source of Funds¹

Period	Number of new dwelling units started									Estimated construction cost (in thousands) ²			
	All units			Privately financed			Publicly financed						
	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm	Total	Privately financed	Publicly financed	
1925 ³	937,000	752,000	185,000	637,000	752,000	185,000	0	0	0	\$4,475,000	\$4,475,000	0	
1933 ⁴	93,000	45,000	48,000	93,000	45,000	48,000	0	0	0	285,446	285,446	0	
1941 ⁵	706,100	434,300	271,800	619,500	369,500	250,200	86,600	64,800	21,800	2,825,895	2,530,765	\$295,130	
1944 ⁶	141,800	96,200	45,600	138,700	93,200	45,500	3,100	3,000	100	495,054	483,231	11,823	
1946	670,500	403,700	266,800	662,500	395,700	266,800	8,000	8,000	0	3,766,767	3,713,778	55,991	
1947	849,000	479,800	369,200	845,600	476,400	369,200	3,400	3,400	0	5,612,798	5,617,425	25,373	
1948	931,300	524,600	406,700	913,500	510,000	403,500	17,800	14,600	3,200	7,199,181	7,028,980	170,181	
1947: First quarter	138,100	81,000	57,100	137,000	79,900	57,100	1,100	1,100	0	808,263	800,592	7,671	
January	39,300	24,200	15,100	38,200	23,100	15,100	1,100	1,100	0	223,577	215,906	7,671	
February	42,800	25,000	17,800	42,800	25,000	17,800	0	0	0	244,425	244,425	0	
March	86,000	51,800	34,200	86,000	31,800	24,200	0	0	0	340,261	340,261	0	
Second quarter	217,300	119,100	98,100	217,000	118,900	98,100	200	200	0	1,381,677	1,381,677	1,200	
April	67,100	37,600	29,500	67,100	37,200	29,500	0	0	0	418,161	418,161	0	
May	77,200	42,200	35,000	77,200	42,000	35,000	0	0	0	452,236	452,236	0	
June	261,200	142,200	119,000	260,700	141,700	119,000	500	500	0	1,774,150	1,770,475	3,675	
July	81,100	44,500	38,600	81,100	44,500	38,600	6	0	0	589,470	587,742	1,728	
August	86,300	47,400	38,900	86,100	47,200	38,900	200	200	0	589,333	589,333	0	
September	93,800	50,300	43,500	93,500	50,000	43,500	300	300	0	645,347	643,400	1,947	
Fourth quarter	232,500	137,500	95,000	230,600	135,900	95,000	1,600	1,600	0	1,698,708	1,685,881	12,327	
October	94,000	53,200	40,800	93,500	52,700	40,800	500	500	0	675,687	675,197	3,490	
November	79,700	48,000	31,700	78,900	47,200	31,700	800	800	0	584,731	578,324	6,407	
December	58,800	36,300	22,500	58,500	36,000	22,500	300	300	0	435,200	432,360	2,930	
1948: First quarter	180,000	102,900	77,100	177,700	100,800	76,900	2,300	2,100	200	1,315,030	1,296,612	18,438	
January	53,500	30,800	52,500	29,800	22,700	1,000	1,000	1,000	0	383,563	374,984	8,579	
February	50,100	29,000	21,100	48,900	28,000	20,900	1,200	1,000	200	368,915	359,420	9,495	
March	76,400	43,100	33,300	76,300	43,000	33,300	100	100	0	562,572	562,208	384	
Second quarter	297,600	160,100	131,500	293,900	164,000	129,300	3,700	1,500	2,200	2,286,758	2,252,961	33,797	
April	99,500	55,000	44,500	98,100	54,000	43,500	1,400	400	1,000	748,848	736,186	12,662	
May	100,300	56,700	43,600	99,200	56,100	43,100	1,100	600	600	769,063	756,635	10,458	
June	97,800	54,400	43,400	96,600	53,900	42,700	1,200	500	700	768,817	758,140	10,677	
Third quarter	263,800	144,100	119,200	259,300	140,100	119,200	4,500	4,000	500	2,111,278	2,065,770	45,508	
July	95,000	52,300	42,700	93,700	51,000	42,700	1,300	1,300	0	750,843	738,659	12,184	
August	86,200	47,200	39,500	85,500	46,400	38,500	1,200	1,200	0	708,748	700,848	16,014	
September	82,200	44,200	38,000	80,500	42,500	38,000	1,700	1,700	0	641,355	624,045	17,310	
Fourth quarter	189,900	111,500	78,400	182,600	78,100	73,000	7,000	7,000	0	1,496,075	1,413,637	72,438	
October	73,400	41,200	33,100	71,900	59,800	52,100	1,500	1,500	0	572,988	560,347	13,541	
November	63,600	38,000	28,600	61,300	35,800	2,300	2,200	200	100	468,040	471,336	26,704	
December	52,900	32,200	20,700	46,400	28,900	20,500	3,500	3,300	200	414,147	381,954	32,193	
1949: First quarter	169,800	94,200	75,600	158,400	84,100	75,300	10,400	10,100	300	1,285,835	1,189,640	96,195	
January	50,000	29,500	20,500	46,300	25,800	20,500	3,700	3,700	0	273,940	240,973	32,967	
February	50,400	28,000	22,400	47,800	25,500	22,300	2,600	2,500	100	382,684	357,270	25,414	
March	69,400	36,700	32,700	65,300	32,800	32,500	4,100	3,900	200	529,211	491,397	37,814	
Second quarter	279,200	157,300	121,900	267,300	147,800	119,500	11,900	9,500	2,400	2,118,686	2,007,563	111,123	
April	88,300	49,500	38,800	85,000	46,700	38,300	3,300	2,800	500	666,383	637,170	29,213	
May	95,400	53,900	41,500	91,300	50,600	40,700	4,100	3,300	800	732,604	692,065	40,541	
June	95,500	53,900	41,600	91,000	50,500	40,500	4,500	3,400	1,100	719,699	678,530	41,369	
Third quarter	298,000	171,600	126,400	290,100	164,700	125,400	7,900	5,900	1,000	2,220,778	2,183,937	66,841	
July	96,100	53,300	42,800	92,700	50,100	42,600	3,400	3,200	200	710,127	682,863	27,264	
August	99,000	55,900	43,100	96,600	54,300	42,300	2,400	1,600	800	743,743	722,208	21,532	
September	102,900	62,400	40,500	100,800	60,300	46,500	2,100	1,100	0	766,908	748,866	18,042	
Fourth quarter	278,800	104,200	60,000	44,300	101,900	57,700	44,200	2,400	2,300	100	2,083,521	2,032,780	50,741
October	95,500	56,700	38,800	93,400	54,700	38,700	2,100	2,000	100	723,697	716,712	19,962	
November	79,000	(19)	(19)	77,600	(19)	(19)	1,400	(19)	(19)	883,750	717,848	11,902	
December	80,000	(19)	(19)	79,100	(19)	(19)	900	(19)	(19)	581,965	573,402	8,563	

¹ The estimates shown here do not include temporary units, conversions, dormitory accommodations, trailers, or military barracks. They do include prefabricated housing units.

² These estimates are based on building-permit records, which, beginning with 1945, have been adjusted for lapsed permits and for lag between permit issuance and start of construction. They are based also on reports of Federal construction contract awards and beginning in 1946, on field surveys in non-permit-issuing places. The data in this table refer to nonfarm dwelling units started, and not to urban dwelling units authorized, as shown in table F-3.

³ All of these estimates contain some error. For example, if the estimate of nonfarm starts is 50,000, the chances are about 19 out of 20 that an actual enumeration would produce a figure between 48,000 and 52,000.

³ Private construction costs are based on permit valuation, adjusted for understatement of costs shown on permit applications. Public construction costs are based on contract values or estimated construction costs for individual projects.

⁴ Housing peak year.

⁵ Depression, low year.

⁶ Recovery peak year prior to wartime limitations.

⁷ Last full year under wartime control.

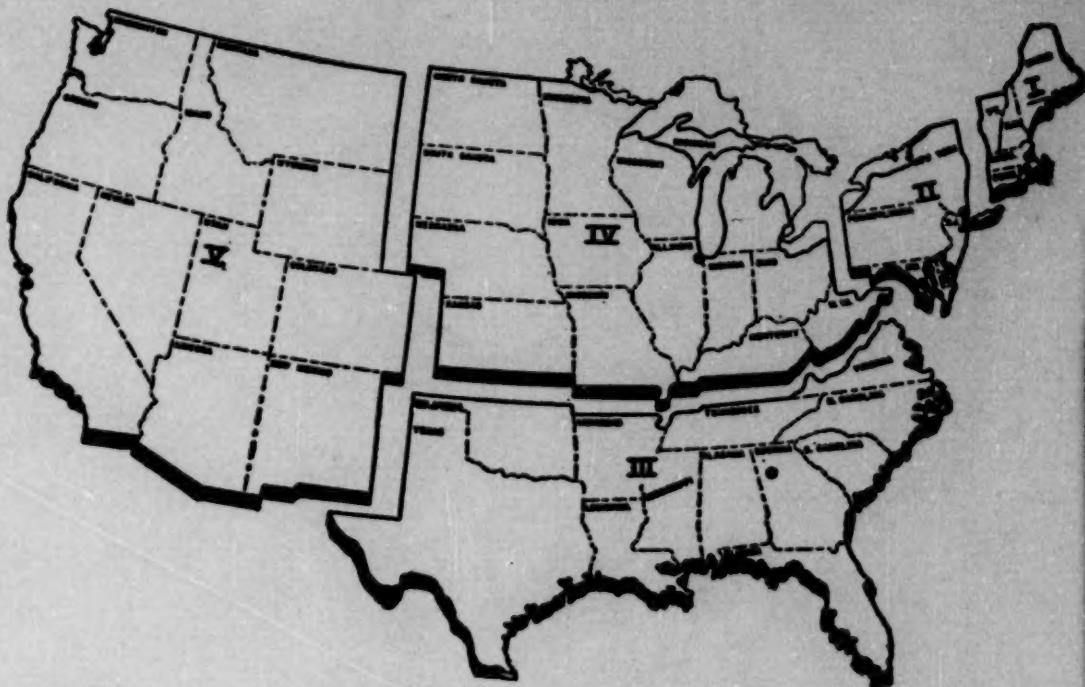
⁸ Less than 50 units.

⁹ Revised.

¹⁰ Preliminary.

¹¹ Not available.

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